Måling av pasienters erfaringer med legevakt:

En systematisk litteraturgjennomgang

PasOpp-rapport Nr 6 - 2006





Tittel Måling av pasienters erfaringer med legevakt: En systematisk

litteraturgjennomgang

Institusjon Nasjonalt kunnskapssenter for helsetjenesten

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ISBN 82-8121-066-4 ISSN 1890-1565

Rapport Nr 6 – 2006

Prosjektnummer 328

Antall sider 41

Oppdragsgiver Nasjonalt kompetansesenter for legevaktmedisin

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Oslo, oktober 2006

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1 Innledning

Nasjonalt kunnskapssenter for helsetjenesten (Kunnskapssenteret) har gjennomført en kartlegging hvor formålet har vært å undersøke hva som finnes, både nasjonalt og internasjonalt, av validerte spørreskjema for å måle pasienterfaringer med legevakttjenesten. Kartleggingen er gjennomført på oppdrag fra Nasjonalt kompetansesenter for legevaktmedisin.

Kunnskapssenteret har tidligere utviklet en rekke spørreskjema om brukererfaringer til bruk i spesialisthelsetjenesten, både for somatiske sykehus og i psykisk helsevern. Det har etter hvert kommet signaler fra ulike hold om at vi også bør undersøke pasienterfaringer innenfor primærhelsetjenesten. I 2006 skal Kunnskapssenteret gjennomføre to litteraturgjennomganger for å forsøke å identifisere validerte måleinstrumenter i primærhelsetjenesten (legevakt og allmennlegetjenesten), samt vurdere hvilken rolle senteret skal ha når det gjelder pasienterfaringer innenfor primærhelsetjenesten.

Dette notatet er første del av tilnærmingen til primærhelsetjenesten, og omhandler en systematisk litteraturgjennomgang av validerte målemetoder for pasienterfaringsundersøkelser blant legevakttjenester. Målet har vært å identifisere instrumenter som kan være relevante i Norge. I Norge har utvikling av spørreskjema og gjennomføring av pasienterfaringsundersøkelser for legevaktpasienter oftest skjedd lokalt. Nasjonalt kompetansesenter for legevaktmedisin har derfor uttrykt ønske om at det utvikles en felles mal for spørreskjema som kan brukes på denne pasientgruppen.

1.1 ORGANISERING AV PROSJEKTET

Kunnskapssenteret har hatt ansvaret for å gjennomføre litteraturgjennomgangen. Kirsten Danielsen har vært prosjektleder, og har hatt Andrew Garratt som veileder i prosjektet. I tillegg til Danielsen og Garratt har Øyvind Andresen Bjertnæs vært med i den interne prosjektgruppen. Steinar Hunskår fra Nasjonalt kompetansesenter for legevaktmedisin har kommet med innspill underveis i prosessen og deltatt i skrivearbeidet.

1.2 OM RAPPORTEN

I kapittel 1 beskrives bakgrunnen for prosjektet. Kapittel 2 gir en oversikt over organiseringen av akutt legehjelp generelt, og i Norge spesielt. Kapittel 3 er metodekapittel, hvor søkestrategi, inklusjonskriterier og kriterier for vurdering av spørreskjema er beskrevet. I kapittel 4 ser vi på resultater fra litteratursøket og beskriver spørreskjemaene vi har inkludert i litteraturgjennomgangen. I kapittel 5 gir vi en oppsummering av litteraturgjennomgangen og vurderer hva kartleggingen betyr for arbeidet med pasienterfaringsundersøkelser med legevakttjenesten i Norge.

Deler av denne rapporten er skrevet på engelsk (kapittel 4). Dette skyldes at det er tidkrevende å oversette dette til norsk, samtidig som vurderingene av spørreskjemaene ved å være på engelsk blir mer tilgjengelig for engelskspråklige.

2 Organisering av legevakttjenesten

2.1 ULIKE MÅTER Å ORGANISERE AKUTT LEGEHJELP

Organiseringen av akutt legehjelp utenfor normal arbeidstid har endret seg betraktelig i Europa i løpet av de siste tiårene. Det er legestanden som er hoveddrivkraften bak forandringene som er gjort. Dette gjør at det blir viktig å også ta i betraktning hva pasientene selv mener om tjenestetilbudet med akutt legehjelp som finnes (Glynn et al. 2004). At organiseringen av legevakttjenesten er i endring i mange land (Leibowitz et al. 2003, Hallam 1997), skyldes i tillegg til legenes egne oppfatninger (Leibowitz 2003, Lattimer 1996), også delvis den økende etterspørselen etter legevakttjenester (Leibowitz et al. 2003, Salisbury 2000), og delvis er det et forsøk på å redusere utgifter til legevakt (Leibowitz et al. 2003).

Internasjonalt er den akutte legehjelpen organisert på ulike måter. En litteraturgjennomgang fant seks forskjellige modeller for organisering av legevakt (Leibowitz et al. 2003), men modellene er ikke gjensidig utelukkende. De seks formene for organisering av legevakt var:

- Practice-based services. Den enkelte lege tar seg av sine pasienter også etter normal arbeidstid.
- 2. Deputizing services. Private firma som ansetter leger som skal drive legevakt.
- 3. Emergency departments. Pasienter fra primærhelsetjenesten som benytter sykehusenes akuttavdelinger utenfor ordinær arbeidstid.
- 4. Co-operatives. Allmennleger (GPs) fra ulike områder organiserer seg (ikke-kommersielt) for å sørge for at pasientene deres har tilgang på legehjelp også utenom ordinær arbeidstid.
- 5. Primary care centres. Istedenfor at pasienten blir behandlet hjemme eller på sykehusets akuttavdeling kommer pasienten til et legesenter utenfor ordinær arbeidstid).
- 6. Telephone triage and advice services. Pasienten får legehjelp via telefon utenom ordinær arbeidstid.

Danmark, Storbritannia, Irland, USA og Australia inngikk i litteraturgjennomgangen til Leibowitz et al. Den amerikanske primærhelsetjenesten skilte seg vesentlig fra primærhelsetjenesten i de andre landene. Alle landene med unntak av USA hadde

det til felles at den akutte legehjelpen i primærhelsetjenesten baserer seg på allmennleger (GPs), men også mellom disse landene varierte organiseringen mye.

2.2 LEGEVAKTTJENESTEN I NORGE

Kommunen skal ifølge Kommunehelsetjenesteloven sørge for at alle som bor eller midlertidig oppholder seg i kommunen skal få nødvendig helsehjelp (NOU 1998: 9). Fastlegene er gjennom helsepersonelloven (LOV 1999-07-02 nr 64) forpliktet til å yte øyeblikkelig hjelp og å delta i kommunal legevakt. Legevakttjenesten omfatter legevaktsentral hvor det er leger tilgjengelig på telefon hele døgnet. Det skal også være minst én lege som kan vurdere øyeblikkelig hjelp-henvendelser og eventuelt gi behandling.

2.2.1 Legevakt og den akuttmedisinske kjeden

Legevakt er en del av den akuttmedisinske kjeden, som kan deles inn i følgende ledd:

A. Utenfor sykehus (prehospitale tjenester):

- Medisinsk nødmeldetjeneste (legevaktsentral og akuttmedisinsk kommunikasjonssentral som skal motta nødmeldinger og ivareta kommunikasjon og koordinering av ressursene ved akuttmedisinske hendelser).
- 2. Primærlegevakt (kommunenes legevakttjeneste).
- 3. Ambulansetjeneste (bil-, båt-, luftambulanse).

B: I sykehus:

Spesialisthelsetjenesten i sykehus som omfatter akuttmottak og de enkelte sykehusavdelingene innen medisin, kirurgi, fødetilbud og andre medisinske spesialiteter (NOU 1998:9). Helseforetakene har også ansvar for ambulansetjenesten.

Medisinsk nødmeldetjeneste er et landsdekkende system som skal håndtere melding, varsling og videre oppfølging i akuttmedisinske situasjoner og ellers når befolkningen har behov for kontakt med helsetjenestens vaktberedskap. Det er i hele landet etablert kommunale eller interkommunale *legevaktsentraler* (LV) som er det desentraliserte knutepunktet i nødmeldetjenesten. LV mottar og formidler henvendelser til lege og annet helsepersonell på vakt. Sykepleier ved LV beholder kontakt med innringer, og gir råd og veiledning. De aller fleste henvendelser til LV er vanlige (enkle) oppdrag. Ved en stor LV viste en undersøkelse at ca. 10 % er hasteoppdrag og < 1 % akuttoppdrag slik disse er klassifisert i Norsk indeks for medisinsk nødhjelp (Upubliserte data fra Nasjonalt kompetansesenter for legevaktmedisin).

Akuttmedisinsk Kommunikasjonssentral (AMK) er lokalisert til sykehus. AMK mottar nødmeldinger over medisinsk alarmtelefon (113) i et definert geografisk område. Allmennpraktikeren kan rådføre seg med vakthavende AMK-lege i akuttmedisinske situasjoner. AMK koordinerer og leder arbeidet ved katastrofer og ved alvorlige sykdommer og ulykker. Oppdragene inndeles i tre hastekategorier: akutt, hast og vanlig. I distrikter som har egen LV, har denne ansvaret for å koordinere vanlige oppdrag og hasteoppdrag, mens AMK vanligvis overtar ledelsen ved akuttoppdrag.

Legevakttjenesten omfatter legevaktsentral og i tillegg skal hvert legevaktdistrikt (en eller flere kommuner) ha minst én lege i vakt som kan vurdere øyeblikkelig hjelphenvendelser og eventuelt gi behandling.

Legevakttjenesten har tre funksjoner i den akuttmedisinske kjeden:

- 1. Diagnostisere og ferdigbehandle akutte allmennmedisinske tilstander der pasienten ikke har behov for sykehusbehandling.
- 2. Diagnostisere tilstander som krever henvisning til eller innleggelse i sykehus, og kanalisere disse pasientene til riktig nivå for behandling.
- 3. Diagnostisere, primærbehandle og stabilisere tilstander som er akutt livstruende, og som krever at pasienten raskt innlegges i sykehus (NOU 1998:9).

Den kommunale legevakttjenesten skal både ta seg av hasteoppdrag og akutte hendelser, men det er ikke tvil om at mye av virksomheten bærer preg av allminnelig allmennlegevirksomhet lagt til kveldstid. Denne delen er økende, og rundt halvparten av pasientene selv sier at de kunne ventet til neste dag eller til kontakt med fastlegen kunne opprettes (Steen & Hunskår 2004).

Kommunal legevakt utenom ordinær arbeidstid blir finansiert på tre forskjellige måter: en fast timebetaling fra kommunene til legene så lenge legen er i beredskap, egenandeler betalt av pasientene og refusjoner fra Rikstrygdeverket (Jøsendal & Aase 2004). I noen ordninger er det fastlønnsavtaler der legen får timelønn for legevakttjeneste.

2.2.2 Organisering av legevakttjenesten

I juni 2001 ble Fastlegeordningen innført. Et av målene med denne ordningen var å strukturere legevakt på dagtid (Jøsendal & Aase 2004). Flere studier har undersøkt legevakttjenesten etter at fastlegeordningen ble innført (Sandvik 2006, Kjelvik 2004). Resultatene viser en stor variasjon i håndtering av legevaktshenvendelser i kommunene/legevaktdistriktene som har vært med i disse undersøkelsene.

Fra 1990-tallet har mange kommuner gått over fra kommunale legevaktordninger til et interkommunalt legevaktsamarbeid. Interkommunal legevakt betyr at legevakten organiseres rundt en fast stasjonær vaktbase der befolkningen kan henvende seg for hjelp. I denne basen har legevaktslegen assistanse fra annet helsepersonell. Ordningen gir også bedre mulighet til å sortere henvendelser etter hastegrad og gjør det dermed lettere å prioritere pasienter (Den norske lægeforening 2005).

Det finnes foreløpig ingen systematisk oversikt over de enkelte legevaktenes driftsform og aktivitet, noe som er bakgrunnen for at Nasjonalt kompetansesenter for legevaktmedisin ble opprettet i 2005. En av senterets oppgaver er å registrere systematiske data fra kommunalt organisert legevakt i Norge, men per i dag finnes det ingen fast nasjonal registrering av driftsdata fra legevakttjenesten. Lokalt finnes det ulike former for registrering av antall pasienter som henvender seg til legevakten, antall konsultasjoner og annet.

Ifølge NOU:1998:9 ble det antatt å være rundt 2,1 millioner henvendelser til legevakten hvert år, utenom ordinær arbeidstid. Når hele døgnet ble inkludert, var det rundt 4,5 millioner øyeblikkelig hjelp-henvendelser i året. Rundt 33% (700 000) av disse henvendesene var hjemmebesøk, rundt 44% (920 000) konsultasjoner og omtrent 22% (450 000) telefonkonsultasjoner.

Disse tallene er gamle og vi kjenner ikke til omfanget av de ulike typene kontakt i dag. En generell trend som har pågått over mange år er imidlertid at stadig færre legevaktkontakter foregår ved at legen reiser på hjemmebesøk til pasienten (Sandvik 2006). Én undersøkelse peker også på at legene i lokal legevaktordning reiste hjem til omtrent hver femte pasient som tok kontakt, mens legene i interkommunal legevakttjeneste nesten aldri gjennomførte sykebesøk (Jøsendal & Aase 2004). Trenden med etablering av interkommunale legevakter kan derfor indikere at andel hjemmebesøk er nedadgående.

Med bakgrunn i ovennevnte legger vi til grunn at aktiviteten ved legevakter i Norge skjer både gjennom hjemmebesøk, konsultasjoner på legekontor og telefonkonsultasjoner. Dette betyr at det i kartleggingen av instrumenter for å måle pasienterfaringer med legevakttjenesten i Norge, er relevant å inkludere instrumenter for alle tre konsultasjonsmåter.

3 Metode

3.1 SØKESTRATEGI

Søkestrategien er utviklet for å finne referanser til artikler om utvikling og evaluering av spørreskjema om pasienters erfaringer med legevakt i primærhelsetjenesten. Den fanger også opp bakgrunnslitteratur om legevakttjenesten. Søkestrategien er satt sammen av søkeord relatert til pasienterfaringer, søkeord relatert til legehjelp utenfor vanlig arbeidstid, søkeord knyttet til spørreskjema, instrument og lignende og til slutt søkeordene validitet og reliabilitet. Dette gav følgende søkestrategi:

(patient satisfaction or patient experiences) and (emergency\$ or acute\$ or after hours\$ or out of hours or night care or out-of-hours care\$ or after-hours primary care services) and (questionnaire\$ or survey\$ or instrument\$ or tool\$ or measure\$) and (reliab\$ or valid\$)

Ved å bruke validitet og reliabilitet i søkestrategien ekskluderer man mange referanser, derfor valgte vi også å gjøre et søk uten disse begrepene i søkestrategien. Følgende søkestrategi ble da brukt:

(patient satisfaction or patient experiences) and (emergency\$ or acute\$ or after hours\$ or out of hours or night care or out-of-hours care\$ or after-hours primary care services) and (questionnaire\$ or survey\$ or instrument\$ or tool\$ or measure\$)

Det ble søkt i databasene CINAHL (1982-2006), EMBASE (1980-2006), MEDLINE(R) (1966-2006) og PsycINFO (1967-2006). Referansene fra de to søkene ble overført til to separate databaser i Reference Manager. Tittel og abstract ble gått igjennom for alle referansene i de to databasene med utgangspunkt i bestemte inklusjonskriterier. Artikler om utvikling eller evaluering av spørreskjema om pasienters erfaringer med legevakt og bakgrunnsartikler om legevaktordninger ble skaffet til veie.

Forfatterne av artiklene om spørreskjemautvikling ble kontaktet med forespørsel om mer informasjon om spørreskjemaet. Når spørreskjemaet ikke var tilgjengelig i artikkelen eller på internett, ba vi forfatterne sende det til oss.

3.1.1 Inklusjonskriterier

Vi inkluderte artikler som handlet om utvikling eller evaluering av spørreskjema for å måle pasienterfaringer med legevakt. Artikler som ikke inneholdt noen form for empirisk evaluering av mål på reliabilitet eller validitet, ble ikke inkludert i litteraturgjennomgangen.

Blant referansene vi fikk gjennom søk i databasene var det også en del litteratur som var relevant som bakgrunnsinformasjon om organisering av legevakt. I tillegg har vi også tatt med artikler om undersøkelser hvor et av de inkluderte spørreskjemaene er brukt.

Artikler om sykehusenes akuttavdelinger (emergency department) ble ekskludert i denne litteraturgjennomgangen.

3.2 VURDERING AV SPØRRESKJEMA

Vurdering av spørreskjema følger tidligere arbeider og anbefalt metode for litteraturgjennomgang (Garratt et al. 2002a, Garratt et al. 2002b, Fitzpatrick et al. 1998, Sitzia 1999). Artiklene som omhandler spørreskjemautvikling ble vurdert av to forskere (KD og AG). Vi har samlet relevant informasjon om pasienter som har vært involvert i utvikling og evaluering av spørreskjemaene, om spørreskjemaenes innhold og om resultater av reliabilitets- og validitetstesting.

Når det gjelder ulike kjennetegn ved pasientene er det informasjon som type pasienter, hvor de kommer fra, hva slags type legevakttjeneste de har mottatt, samt alder, kjønn og andre tilgjengelige bakgrunnsvariabler vi har sett etter. For å kunne vurdere spørreskjemaenes innhold er det informasjon om spørsmål, skalaer/dimensjoner og svarskalaer vi har vært interessert i, mens når det gjelder vurderingen av spørreskjemaenes måleegenskaper, er det reliabilitets- og validitetstesting av spørreskjemaene som har vært i fokus (Garratt et al. 2002a).

For å beskrive spørreskjemaenes reliabilitet brukes resultater av tester på intern konsistens og test-retest-reliabilitet. Spørreskjemaenes validitet inkluderer kvalitative og kvantitative metoder for validering. Innholdsvaliditet (content and face validity) er kvalitative mål på om spørreskjemaet dekker de områdene det er ment å skulle måle. Vi har også sett på begrepsvaliditeten (construct validity). Dette er et kvantitativt mål på validitet og består av hypoteser som er brukt, framgangsmåter for å finne relevante spørsmål og analyser for å teste hypotesen(e) (National Centre for Health Outcomes Development 2000).

3.2.1 Mer om metoden for utvikling og vurdering av spørreskjema

Utviklingen av spørreskjemaer for å måle pasienterfaringer er en omfattende prosess. Emner og spørsmål med potensiell relevans for den aktuelle pasientgruppen må identifiseres, og spørsmål og skalaer må konstrueres og testes (Garratt et al. 2002a). Utformingen av innholdet i et måleinstrument kan utledes fra litteratur-

gjennomgang, teorier og kvalitative intervjuer med pasienter eller helsepersonell. Vanligvis bestemmes innholdet i et spørreskjema på grunnlag av en kombinasjon av disse metodene. For å øke innholdsvaliditeten (content validity) er det viktig at pasientenes synspunkter blir tatt hensyn til når man lager spørsmålene til et spørreskjema (Fitzpatrick et al. 1998). Når spørsmålene er laget, må svarskalaen bestemmes. Det vanligste er å bruke en skala med fem beskrivende svarverdier, som for eksempel Likert – skala. Når svarskalaen er konstruert, blir spørreskjemaet vanligvis testet på et lite, representativt utvalg av pasienter for å se om det er spørsmål som er uklare eller tvetydige (Garratt et al. 2002a).

Før et spørreskjema kan anbefales for bruk er det nødvendig å gjøre tester av skjemaets reliabilitet og validitet. Datakvaliteten, svarskalaene og spørreskjemaets ulike dimensjoner/underliggende strukturer bør testes samtidig. Når det gjelder enkeltspørsmål er det viktig å se på frafall på enkeltspørsmål (missing data) og svarfrekvens. Spørsmål med stor andel manglende svar bør tas ut av spørreskjemaet. Spørsmål som er skjevfordelt mot enten det mest positive eller det mest negative svaralternativet (floor and ceiling) bør også tas ut av spørreskjemaet fordi de ikke skiller godt nok mellom positive og negative pasienterfaringer (Garratt et al. 2002a).

De som utvikler spørsmål har ofte hypoteser basert på egne erfaringer og teorier om hva slags spørsmål som bør være med i spørreskjemaet, men spørsmål kan også utvikles empirisk ved hjelp av statistiske teknikker som faktoranalyse og principal component analysis (PCA). Sistnevnte teknikk vurderer den underliggende strukturen for spørsmålene og lager grupper, eller dimensjoner, av spørsmål som måler omtrent det samme. Den interne konsistensen for disse dimensjonene blir vanligvis sjekket ved enkeltspørsmål-skala-korrelasjon (Garratt et al. 2006).

Reliabilitet har å gjøre med intern konsistens, det vil altså si styrken på relasjonen mellom et spørsmål og resten av dimensjonen. Cronbachs alfa måler korrelasjonen mellom alle spørsmålene i en dimensjon, og bør resultere i et reliabilitetsestimat som er over 0.7. Jo høyere alfa-verdien er, jo sterkere er korrelasjonen mellom spørsmålene i dimensjonen (Garratt et al. 2006, Fitzpatrick et al. 1998). Spørreskjema som ikke kun består av enkeltspørsmål må bruke test-retest for å måle spørreskjemaets reliabilitet. Dette er en metode som tar hensyn til endringer over tid og er et konkret mål på om et spørreskjema gir liknende resultater ved gjentatt bruk. Ved å gjøre en test-retest kan man se om resultatskårene for det samme spørreskjemaet er omtrent de samme på to tidspunkt. Det finnes ikke klare regler på hvor lang tid det skal gå mellom første og andre utsendelse av spørreskjema til en gruppe pasienter. Likevel er det enighet om at det ikke bør være så kort tid at pasientene tydelig kan huske hva de svarte første gangen de fylte ut spørreskjemaet, men heller ikke så lang tid at pasientens helsetilstand kan ha endret seg. I praksis vil det gå minst to uker mellom første og andre gang en pasient får et spørreskjema i en postal spørreundersøkelse.

Både kvalitative og kvantitative metoder kan brukes for å måle et spørreskjemas validitet. Er spørreskjemaet valid betyr det at det måler hva det er laget for å måle. Validiteten kan imidlertid ikke fastsettes ved en enkelt analyse, men er noe som bør

måles i forbindelse med bruken av spørreskjemaet. Nye spørreskjemaer, spørreskjemaer som har blitt endret og spørreskjemaer brukt i nye settinger må alltid validitetstestes (Garratt et al. 2002a).

Tabellene som inngår i kapitlet om vurdering av spørreskjemaene er strukturert etter samme mal slik at man kan se hva slags informasjon som finnes om hvert spørreskjema. Tomme kolonner i tabellen betyr at informasjon ikke finnes i artiklene. Vi har også oppgitt to desimaler i tabellene med noen unntak der det bare var oppgitt én desimal i artikkelen tallene er hentet fra.

4 Resultater

4.1 SØKESTRATEGI

Den første søkestrategien (*med* validitet og reliabilitet) gav 253 treff. Den andre søkestrategien (*uten* validitet og reliabilitet) gav 2508 referanser. En første grovsortering av treffene reduserte antall referanser i søket *med* reliabilitet og validitet til 63 og til 240 i søket *uten* validitet og reliabilitet. Til slutt, etter å ha vurdert alle referansene igjen, satt vi igjen med tre spørreskjema som vi inkluderte i litteraturgjennomgangen. Spørreskjemaer som var utviklet for å måle pasienterfaringer med sykehusenes akuttmottak ble ekskludert.

Mange av referansene var i tillegg relevante som bakgrunnsinformasjon. Vi var også interessert i referanselistene til artiklene vi inkluderte, og ett av spørreskjemaene vi har tatt med her fant vi på denne måten. I alt ble fire spørreskjema om pasienters erfaringer med legevakt inkludert i denne litteraturgjennomgangen. To av spørreskjemaene er utviklet i England og to i Nederland.

Tabell 1: Oversikt over spørreskjema inkludert i litteraturgjennomgangen.

Spørreskjema	Hovedforfatter	År	Beskrivelse	Omfang	Land
The Patient Satisfaction with Out- of-hours Care (PSOC) questionnaire	McKinley, R.	1997	Utviklet for å kunne brukes innenfor ulike organiseringer av legevakt	32 spørsmål	England
The Short Questionnaire of Out- of-Hours Care (SQOC)	Salisbury, C.	2005	Kort spørreskjema utviklet for å kunne brukes innenfor ulike organiseringer av legevakt	7 spørsmål	England
Patient satisfaction questionnaire for use with out-of-hours care in the Netherlands	Van Uden, CJT	2005	Utviklet for organisering av legevakt i GP cooperatives	Tre spørreskjema, ulikt antall spørsmål	Nederland
Patient satisfaction questionnaire for assessing large-scale out-of-hours primary health care in the Netherlands	Moll van Charante, E	2006	Utviklet for organisering av legevakt i GP cooperatives	Tre spørreskjema, ulikt antall spørsmål	Nederland

4.2 VURDERING AV SPØRRESKJEMA

I denne delen av rapporten har vi sett etter følgende informasjon om spørreskjemaene:

- Purpose: formålet med spørreskjemaet og hva slags pasientgruppe (setting) det kan brukes på.
- Description: beskrivelse av spørreskjemautvikling, spørsmål, dimensjoner og svarskala.
- Patients: beskrivelse av pasientene spørreskjemaet er utviklet for og med.
- Reliability: resultater av tester på intern konsistens og test-retest-reliabilitet.
- Validity: resultater av kvalitative og kvantitative metoder som er brukt for validering av spørreskjemaet.
- Commentary: våre vurderinger av spørreskjemaet.

4.2.1 Patient satisfaction with Out-of-hours Care (PSOC)

Purpose

The aim was to develop a reliable, valid measure of patient satisfaction with out-of-hours care suitable for large scale service evaluation. The PSOC can be administered by interview or completed by the patient or carer for measuring patient satisfaction with out-of-hours care in the United Kingdom (McKinley et al. 1997). It is suitable for wide use as well as being sensitive to different levels of satisfaction (McKinley, personal communication).

Description

The questionnaire items were developed following a review of the patient satisfaction literature including existing questionnaires, focus groups with patients and semi-structured interviews with patients.

Qualitative methods were used to identify issues about out-of-hours care important to patients that could contribute to questionnaire items. Two patient focus groups were led by a non-clinician. Patients were recruited from general practice registers and community groups to represent a range of patients from parents to guardians of children to elderly people from different ethnic, cultural, and social backgrounds. Parents and guardians of children were included because they initiate many requests for out-of-hours care. The focus groups were recorded and coded separately.

The material from the focus groups informed the content of semi-structured interviews with patients or their carers who had recently requested out-of-hours care from two large city practices or their deputising service. The interviews further explored issues important to patients and potential questionnaire items were tested. Issues important to the patients identified during the qualitative phase included all elements identified from other studies and also additional issues.

Content validity was initially shown by the outcome of the development interviews and the failure of patients to identify additional issues. To further ensure content

validity patients interviewed during development of the questionnaire were asked to comment on its content and suggest additional issues or questions. There were 47 positively and negatively worded questions within the preliminary questionnaire. During the developmental phase, items with high levels of missing data, that were ambigious or confusing, or gave very skewed responses were either removed, rewritten, or replaced.

Principal components analysis with varimax rotation (eigenvalue above 1.0) of 1402 completed questionnaires from the trial of out-of-hours care identified six components (Table 2). Questions relating to overall satisfaction were omitted because it was anticipated that all questions would load with this underlying general component. Responses from patients who received telephone advice only were also omitted because they did not answer the questions related to receiving a visit. The scales (number of items) were access to out-of-ours care (3), communication and management (7), continuity of care (4), delay until visit (3), doctor's attitude (5), initial contact person (2), telephone advice (4), and overall satisfaction (4). There was no difference in the scales produced for two groups of patients from Leicester and Manchester. To assess content validity, twelve general practitioners, three practice nurses, and eight colleagues not otherwise involved in the development of the questionnaire from the departments of general practice in Manchester and Leicester reviewed the components indicated by the principal components analysis. They judged the scales to be coherent and to represent a separate scale related to satisfaction with out-of-hours care.

The final version of the questionnaire comprises 32 questions. Items use a five-point Likert scale of strongly agree, agree, neutral, disagree, strongly disagree. Scale scores are calculated by summing items that are scored one to five (five is the highest level of satisfaction), and expressing the total as a percentage of the maximum possible score for the scale. Respondents must complete half or more of the items within a scale to produce a score.

Scale scores were calculated for a median (interquartile range) of 97.7% (94.5% to 98.1%) of responses. The median (interquartile range) completion rate for questions was 96.5% (95.7 to 97.1). Mean scale scores (SD) were: access to out-of-ours care 69.71 (20.01), communication and management 65.78 (21.81), continuity of care 58.31 (19.92), delay until visit 46.54 (23.65), doctor's attitude 72.19 (23.92), initial contact person 69.37 (21.57), telephone advice 63.04 (23.17), and overall satisfaction 66.12 (23.14).

The questionnaire has undergone further development and now there are three versions of the PSOC for home visits, primary care centre based care and telephone advice. An additional scale of satisfaction with choice of locus of care, is designed to reflect the change in provision of out-of-hours care (McKinley, personal communication).

Patients

The questionnaire was developed and tested with two focus groups of patients, qualitative interviews with two groups of patients, two postal pilots and a main postal survey.

Eleven general practice patients participated in the focus groups. Seven were female, six were from ethnic minorities, five were parents or guardians for children, three were adults with chronic illness, and three were aged over 65. One came from a rural area and five from inner city areas.

The qualitative work involved 69 patients. The semi-structured interviews included 28 patients; 13 (46%) were under 16 years of age, 7 (25%) were over 65, 17 (61%) were female and 24 (86%) patients had an ethnic origin described as white. The questionnaire was subsequently administered by interview to 41 patients who requested out-of-hours care from the same practices; 21 (51%) were under 16 years old, 7 (17%) were over 65 years old, 21 (51%) of the patients were female and 36 (87%) had an ethnic origin described as white.

There were two postal pilots, the first with a 48-item questionnaire administered to patients from six practices in the city and suburbs of Leicester and the second with a 34-item questionnaire administered to patients from the six Leicester practices and one practice in Manchester. 378 general practice patients participated in the postal pilots; 160 (42%) were under 16 years old, 66 (17%) were over 65, 222 (59%) patients were female and 306 (81%) had an ethnic origin described as white. Consecutive patients or carers who had requested out-of-hours care were sent a questionnaire within 72 hours and a self addressed envelope for return. Responses from patients who received telephone advice only were omitted. These patients did not answer the questions related to receiving a visit. For most practices response rates were of over 50% with a single mailing.

The main survey was part of a comparative trial of out-of-hours care provided by deputising services and practice doctors in eleven practices in Greater Manchester and three practices in Leicester. This included 1466 patient participants; 726 (49%) were under 16 years old, 226 (15%) were over 65 years old, 843 (57%) were female and 1304 (89%) had an ethnic origin described as white. The questionnaire was completed by 1402 (95.6%) patients, 163 of whom received telephone advice only.

For purposes of assessing test-retest reliability, 200 consecutive patients or their carers recruited to the study were asked to complete a second questionnaire later the same day and return it by post. A total of 112 (56.0%) restest questionnaires were returned.

Reliability

Reliability was assessed by internal consistency and test-retest methods (McKinley, personal communication). The levels of Cronbach's alpha for individual scales are shown in Table 2. The scales of access to out-of-hours care, continuity of care and delay until visit did not meet the criterion of 0.7. With the exception of the scale of initial contact person, Pearson's test-retest correlation coefficients were above 0.7.

The retest scores were generally lower, so that there may have been a real fall in satisfaction with time. The lower retest scores may reflect the difference in the method of application, with greater expressed satisfaction when research assistants were present.

Validity

The authors state that content validity was ensured by the process of questionnaire development which included the failure of patients to identify issues in addition to those included within the questionnaire.

Construct validity was assessed through inter-scale correlations, which included overall satisfaction. The scales tended to be more highly correlated with overall satisfaction than the other scales. Continuity of care had the lowest inter-scale correlations.

Commentary

The PSOC is designed to evaluate satisfaction with domiciliary out-of-hours care and did not include questions about the environment in which care was provided. The authors state that it can be successfully administered by interview and probably by post to a broad range of urban patients.

The questionnaire was developed following a literature review, involvement of patients and health professional and therefore has good evidence for content validity. The authors do not report levels of missing data or descriptive statistics at the item or scale level. Some of the scales have evidence for internal and test-retest reliability. However, item-total correlations were not reported and three scales of access to out-of-hours care, continuity of care and delay until visit fell well below the criterion of 0.7 for internal consistency. The scale of initial contact person performed poorly in the test-retest analysis. These scales should be used with caution in future studies. The testing for construct validity was not extensive merely involving comparisons of the scale scores and overall satisfaction.

The questionnaire has been used in several surveys. Shipman et al. (2000) used the PSOC, as refined by Salisbury (1997). The study aim was to compare patient satisfaction with GP practice-based arrangements, cooperative and deputizing services within one geographical area 15 months after a co-operative was established. This was also compared with telephone, primary care centre and home consultations within the co-operative. The response rate was 53%.

Smith et al. (2001) modified the PSOC to take account of differences in the Irish health care system. The study aim was to record patients' experiences on a specific occasion and elicit their satisfaction with out-of-ours care in general. The response rate was 58%.

Glynn et al. (2004) used a version of the PSOC to measure patient satisfaction for patients who contacted out-of-hours services over a period of 24 days. The study aim was to assess whether health status influences patient satisfaction with out-of-hours

care provided by a family doctor cooperative, and to examine the impact of gender, age, socio-economic status and call outcome. The response rate was 55% (531/966).

Pickin et al (2004) used Salisbury's adaptation of the PSCO. The aim of the study was to assess the impact of the establishing a general practice co-operative on use of A&E services, patient satisfaction and GP satisfaction. The response rate was 71%.

Finally, Thompson et al. (2004) also used Salisbury's version in their study which assessed patient satisfaction at two out-of-hours cooperatives in Northern-Ireland. The response rate was 60.5%.

Tabell 2: Patient satisfaction with Out-of-hours Care (PSOC) (n=1402). Questionnaire content, descriptive statistics and reliability.

Scale / item	Missing data (%)	Mean (sd) ^a	Factor analysis - eigenvalues / loadings	Cronbach's alpha (scale) / item-total correlation	Test-retest correlation
Communication and management		65.78(21.81)		0.88	0.86
Satisfied with doctor's explanation		05.70(21.01)	0.78	0.00	0.00
Doctor's advice about getting more help			0.66		
Better understanding of problem			0.82		
More explanation from the doctor			0.51		
Doctor's recommendation made be better			0.68		
Follow doctor's advice			0.81		
Follow doctor's advice			0.71		
Ooctor's attitude		72.19(23.92)		0.87	0.82
Doctor reluctant to visit			0.63		
Doctor examined more carefully			0.52		
Doctor made me feel guilty			0.84		
Felt that I wasted doctors time			0.84		
The doctor was rushed			0.70		
Continuity of care		58.31(19.92)		0.69	0.72
Happy to see any doctor			0.77		
No need to se own doctor			0.80		
Preferred to see own doctor			0.64		
Generally no need to see own doctor			0.64		
Delay until visit		46.54(23.65)		0.65	0.81
Uncertain about waiting time			0.55		
Preferred doctor to arrive sooner			0.78		
Worried because the doctor was late			0.79		
Access to out of hour care		69.71 (20.01)		0.61	0.76
Difficult to get through on telephone			0.77		
Arrangement for contact could be improved			0.66		
No problems with contact			0.67		
nitial contact person		69.37(21.57)	0.05	0.72	0.62
Got necessary advice from initial contact			0.85		
Initial contact understood the problem			0.81		
Telephone advice		63.04(23.17)		0.79	
Easy to get advice from the doctor					
Would prefer a visit from the doctor					
Doctor right to give telephone advice					
Little unhappy with telephone advice					
Overall satisfaction		66.12(23.14)		0.77	0.82
Prefer to see a different doctor next time					
Overall delighted with the care received					
Little unhappy with received care					
Perfect out of hours service					

a Scale scores are calculated by summing items that are scored one to five (five is the highest level of satisfaction), and expressing the total as a percentage of the maximum possible score for the scale. Respondents must complete half or more of the items within a scale to produce a score.

4.2.2 Patient satisfaction questionnaire for assessing large-scale out-of-hours primary health care in The Netherlands

Purpose

The aim was to develop a reliable postal questionnaire for wide-scale use by patients contacting their out-of-hours GP cooperative and to present the results of a national survey. The questionnaire was designed for benchmarking purposes that can both assist individual GP cooperatives in improving the quality of care provision and for national comparisons (Moll van Charante et al. 2006).

Description

The questionnaire was developed following a literature review and interviews with patients and health professionals to identify issues of potential relevance. Two postal pilot surveys and further interviews informed the removal or rephrasing of items. An item bank with potential questions on all three types of contact with the GP cooperative was developed.

Eight GPs and four telephone nurses reviewed the items and were asked to focus on items with the potential for improving quality of care. They added a few items on the telephone triage and continuity of care and proposed a few open questions for additional comments.

Six patients from a regional patient federation formed a panel that reviewed the questionnaire, commented on item relevance and phrasing and provided additional items. They preferred a functional rather than random ordering of items, linked to the telephone nurse, doctor and organization. They found positively or negatively worded items to be confusing and overabundant. They suggested a 10-point scale similar to the widely used grading system in schools. They added two items relating to accessibility and waiting room atmosphere.

After studying the numerous written comments by respondents, questions that were ambiguous, confusing or had more than 20% missing data were rewrote or replaced. Respondents found many questions overly complex or long. The revised questionnaire was presented to 13 patients who had recently contacted a cooperative. Some items were rephrased including four items with over 20% missing data. An item concerning accessibility of the pharmacy was added.

Experts in the field of questionnaire development independently commented on various clinimetric aspects on the first questionnaire. Following their suggestions, three separate questionnaires were devised for telephone advice (14 items), centre consultations (29 items) and home visit (23 items) as shown in Table 3.

Of the 14 items for patients that had got telephone advice, 11 related to the nurse that they spoke to: advice helped me, advice or treatment, clear explanation, confidence, feasibility of advice, friendliness, professionalism, reassurance, taking me seriously, taking time to talk and understanding my problem. The other three items related to organization at the centre: accessibility of pharmacy, accessibility by telephone, and general information on cooperative.

Of the 29 items for centre consultations, 7 related to the telephone nurse: clear explanation, confidence, friendliness, professionalism, taking me seriously, taking time to talk and understanding my problem. 12 items related to the doctor: advice or treatment, advice/treatment helped me, careful physical examination, clear explanation, confidence, feasibility of advice/treatment, friendliness, taking me seriously, professionalism, reassurance, taking time to talk and understanding my problem. The remaining 10 items related to organization at the centre: accessibility by telephone, accessibility pharmacy, accessibility of the building, furnishing of waiting room, general information on cooperative, parking facilities, signposting to the GP cooperative, time between contact and consultation, time in waiting room and tidiness and hygiene.

Of the 23 items for home visits, 7 related to the telephone nurse: clear explanation, confidence, friendliness, professionalism, taking me seriously, taking time to talk and understanding my problem. 12 items related to the doctor: advice or treatment, advice/treatment helped me, careful physical examination, clear explanation, confidence, feasibility of advice/treatment, friendliness, professionalism, reassurance, taking me seriously, taking time to talk and understanding my problem. 4 items related to organization: accessibility by telephone, accessibility pharmacy, general information on cooperative and time between contact and home visit.

Patients

Two postal pilots were performed to evaluate the questionnaires. In the first pilot, 696 consecutive patients or carers were sent questionnaires within 48 hours of their request, stratified for type of contact. Reminders were not used. 85 (41%) questionnaires were returned. In the second pilot, 180 postal questionnaires were sent and 87 (48%) were returned.

In the main survey all GP cooperatives in The Netherlands were invited to participate in the study through widespread advertisements in a national medical paper between March 2003 and June 2004. This produced 26 GP cooperatives, serving around a quarter of the total Dutch population. Two GP cooperatives were excluded due to logistical problems. The cooperatives sent postal questionnaires to 200 consecutive patients within 48 hours following all three types of contact. Reminders were sent at 10 days. Patients who had died were excluded. Questionnaires were returned to the researcher. 14 400 questionnaires were mailed and 7520 (52.2%) were returned; 2352 (49.0%), 2512 (52.3%), and 2656 (55.3%) for telephone advice, centre consultation and home visit respectively.

The telephone consultation patients included 951 (40.4%) males and the numbers for the different age groups (years) were: 0-4 years 520 (22.1%), 5-14 years 240 (10.2%), 15-24 years 172 (7.3%), 25-44 years 601 (25.6%), 45-64 years 448 (19.1%), 65-74 years 169 (7.2%) and over 75 years 196 (8.3%).

The centre consultation patients included 1240 (49.4%) males and the numbers for the different age group (years) were: 0-4 years 538 (21.4%), 5-14 years 304 (12.1), 15-

24 years 252 (10.0%), 25-44 years 655 (26.1%), 45-64 years 509 (20.3%), 65-74 years 150 (6.0%) and over 75 years 99 (3.9%).

The home visit patients included 1291 (48.6%) males and the numbers for the different age groups (years) were: 0-4 years 52 (2.0%), 5-14 years 32 (1.2%), 15-24 years 49 (1.8%), 25-44 years 238 (9.0%), 45-64 years 625 (23.5%), 65-74 years 568 (21.4%) and over 75 years 1085 (40.9%).

Response rates for the cooperatives ranged from 36 to 57% for telephone consultation (mean 49%, SD 5.6), from 39 to 67% for centre consultation (mean 52%, SD 7.6) and from 41 to 74% for home visit (mean 55%, SD 7.7). There was no significant association between the response rate per GP cooperative and any of the scales for the different types of contact.

Test-retest reliability was assessed for all respondents in one cooperative; a second questionnaire was sent within a week after the first was returned. Of the 600 questionnaires mailed, 338 were returned (57%). Of these, 155 returned the retest questionnaire (45%).

Non-respondent and respondents were compared for three of the participating GP cooperatives in relation to age, sex, type of insurance, trauma, part of the day and reason for consultation. A total of 1636 of 1800 patients who had received a postal questionnaire were retrieved from the electronic medical records (9% missing cases), and divided into a response group (n = 828, 51%) and a non-response group (n = 808, 49%). There were significantly higher responses for males, age groups between 5 and 14 and between 45 and 74, and privately insured. No differences were found for the other variables. Neither sex nor type of insurance was found to have an effect on satisfaction scores. The relation between age and satisfaction was less clear, since both higher and lower levels of satisfaction showed little, if any, overall impact. The variables that differed significantly between the response and the non-response groups (sex, age, type of insurance) did not appear to have any effect on the satisfaction scores.

To assess more personal reasons for non-response five randomly chosen cooperatives that mailed 3000 questionnaires were selected. Using a tear of strip and envelope as part of the reminder, patients not wishing to return a questionnaire were asked to tick one of four pre-structured reasons: forgotten/not interested, too ill, dissatisfied, language problem or to add an own comment. Reminder strips were returned by 463 patients who did not fill out a questionnaire, representing a mean feedback of 15.4% for all types of contact. The main reason for non-response were 'forgotten/not interested' (n=160, 34.6%) and 'too ill' (n = 83, 17.9%) with 30 patients (6.5%) citing dissatisfaction as a reason for non-response.

Reliability

Item-total correlations for the telephone advice questionnaire ranged from 0.77-0.92 (Table 3) and from 0.53-0.59 for the telephone nurse and organisation scales respectively. Item-total correlations for the centre consultation questionnaire ranged from 0.84-0.92 (Table 3), from 0.81-0.94 and from 0.49-0.67 for the telephone nurse,

doctor and organisation scales respectively. Item-total correlations for the home visit questionnaire ranged from 0.86-0.93 (Table 3), from 0.79-0.94 and from 0.63-0.74 for the telephone nurse, doctor and organisation scales respectively.

Cronbach's alpha coefficient exceeded 0.70 for all the scales within the questionnaires (Table 3). The differences between the test and retest scale scores were small. The intraclass correlation coefficients ranged from 0.79 for the overall satisfaction scale within the telephone advice questionnaire to 0.95 for the doctor scale within the home visit questionnaire.

Validity

The authors stated that content validity appears to be ensured through the combination of literature review and inclusion of patients and health care professionals in the development of the questionnaire.

There is some empirical support for the structure of the questionnaire following the results of principal component analysis, however, this was undertaken at an early stage in the questionnaires development. There was no formal testing of construct validity including comparisons with variables known to be associated with patient satisfaction.

Commentary

The development of the questionnaire was based on a literature review and patient and health professional involvement. This lends the questionnaire content validity. Following the application of principal component analysis evidence was found for the internal construct validity or proposed scales within the questionnaire. The instrument has good evidence for internal consistency and test-retest reliability. However, the questionnaire scores have not been compared to variables known to be associated with patient satisfaction and hence there is very little evidence for the construct validity of the questionnaire.

Tabell 3: Patient satisfaction questionnaire for assessing large-scale out-of-hours primary health care in the Netherlands (n=7520). Questionnaire content, descriptive statistics and reliability.

	Missing data		Factor analysis - eigenvalues	Cronbach's alpha (scale) / item-total	Test-retes
Scale / item	(%)	Mean (sd) ^a	/ loadings ^b	correlation	correlatio
Home visits				0.85	0.89
Telephone nurse				0.98	0.89
Professionalism	528(19.9)	7.83(1.52)		0.91	0.91
Clear explanation	694(26.1)	7.83(1.52) 7.89(1.62)		-	
Understanding my problem	427(16.1)	7.09(1.02) 7.96(1.72)		0.93 0.93	
Friendliness				0.86	
Confidence	320(12.0)	7.97(1.44)			
	456(17.2)	7.97(1.70)		0.92	
Taking time to talk	428(16.1)	8.06(1.53)		0.89	
Taking me seriously	377(14.2)	8.09(1.62)		0.92	
Doctor				0.98	0.95
Advice/treatment helped me	586(22.1)	7.86(1.88)		0.79	0.55
Feasibility of advice/treatment	620(23.3)	8.03(1.62)		0.79	
Reassurance	299(11.3)	8.20(1.64)		0.85	
Advice or treatment	299(11.3) 307(11.6)	8.20(1.64) 8.20(1.72)		0.91	
Clear explanation	30/(11.6) 330(12.4)	8.20(1.72) 8.21(1.57)		0.93	
Understanding my problem					
Confidence	251(9.5)	8.30(1.57)		0.93	
	211(7.9)	8.30(1.60)		0.94	
Careful physical examination	320(12.0)	8.32(1.57)		0.91	
Taking time to talk	231(8.7)	8.32(1.50)		0.89	
Professionalism	279(10.5)	8.32(1.44)		0.91	
Friendliness	178(6.7)	8.35(1.37)		0.84	
Taking me seriously	226(8.5)	8.39(1.51)		0.92	
Organization				0.86	0.90
Accessibility pharmacy	1199(45.1)	7.27(1.83)		0.63	0.50
General information	609(22.9)	7.47(1.67)		0.74	
Time between contact and home visit				0.73	
Accessibility by telephone	399(15.0) 270(10.2)	7.65(1.84) 7.91(1.66)		0.73	
Accessibility by telephone	2/0(10.2)	7.91(1.00)		0./3	
Centre consultations				0.76	0.94
Telephone nurse				0.97	0.91
Professionalism	387(15.4)	7.66(1.47)		0.88	-
Clear explanation	548(21.8)	7.78(1.57)		0.91	
Confidence	374(14.9)	7.78(1.61)		0.91	
Friendliness	225(9.0)	7.81(1.43)		0.84	
Understanding my problem	298(11.9)	7.87(1.58)		0.92	
Taking time to talk	286(11.4)	7.90(1.49)		0.88	
Taking me seriously	235(9.4)	8.00(1.54)		0.89	
				•	
Doctor	,	- 651		0.98	0.93
Advice/treatment helped me	330(13.1)	7.66(1.95)		0.81	
Advice or treatment	178(7.1)	7.79(1.76)		0.91	
Reassurance	195(7.8)	7.84(1.78)		0.92	
Feasibility of advice/treatment	323(12.9)	7.88(1.67)		0.84	
Confidence	106(4.2)	7.89(1.76)		0.94	
Clear explanation	171(6.8)	7.91(1.68)		0.91	
Taking time to talk	124(4.9)	7.91(1.69)		0.86	
Careful physical examination	294(11.7)	7.92(1.67)		0.89	
Friendliness	82(3.3)	7.99(1.45)		0.82	
Professionalism	135(5.4)	8.01(1.50)		0.88	
Understanding my problem	159(6.3)	8.02(1.66)		0.90	
Taking me seriously	94(3.7)	8.08(1.59)		0.90	

Scale / item	Missing data (%)	Mean (sd) ^a	Factor analysis - eigenvalues / loadings ^b	Cronbach's alpha (scale) / item-total correlation	Test-retest
Organization				0.88	0.89
Furnishings of waiting room	219(8.7)	7.03(1.71)		0.62	0.03
General information on cooperative	415(16.5)	7.09(1.63)		0.67	
Signposting to the GP cooperative	360(14.3)	7.26(1.73)		0.64	
Time in waiting room	173(6.9)	7.35(1.91)		0.58	
Parking facilities	130(5.2)	7.47(1.85)		0.49	
Accessibility pharmacy	860(34.2)	7.53(1.69)		0.51	
Accessibility by telephone	182(7.2)	7.78(1.64)		0.64	
Tidiness and hygiene	144(5.7)	7.82(1.30)		0.69	
Time between contact and consultation	285(11.3)	7.85(1.58)		0.65	
Accessibility of the building	146(5.8)	7.93(1.41)		0.66	
Telephone advice				0.81	0.79
Telephone nurse				0.98	0.79
Advice helped me	372(15.8)	7.24(2.22)		0.96	0.05
Reassurance	3/2(15.6) 311(13.2)	7.24(2.22) 7.39(1.97)		0.91	
Advice or treatment	221(9.4)	7.39(1.97) 7.40(2.05)		0.91	
Professionalism	234(9.9)	7.40(2.05) 7.41(1.65)		0.88	
Confidence	234(9.9) 205(8.7)	7.41(1.05) 7.46(1.91)		0.82	
Feasibility of advice	388(16.5)	7.46(1.91) 7.56(1.96)		0.92	
Understanding my problem	177(7.5)	7.50(1.90) 7.62(1.83)		0.92	
Clear explanation	1//(/.5) 255(10.8)	7.62(1.63) 7.66(1.76)		0.92	
Taking me seriously	134(5.7)	7.69(1.76) 7.69(1.83)		0.89	
Friendliness	134(5.7)	7.09(1.03) 7.70(1.54)		0.89	
Taking time to talk	153(6.5)	7.70(1.54) 7.79(1.67)		0.84	
raking time to talk	193(0.5)	7.79(1.07)		0.04	
Organization				0.74	0.92
General information on cooperative	477(20.3)	6.83(1.73)		0.59	
Accessibility of pharmacy	1016(43.2)	7.35(1.66)		0.53	
Accessibility by telephone	145(6.2)	7.60(1.69)		0.58	

a Information relating to questionnaire scoring was not reported.

4.2.3 Short Questionnaire for Out-of-hours Care (SQOC)

Purpose

The aim was to produce a short, reliable and valid measure of patient satisfaction that could be used by different providers of out-of-hours care. The questionnaire is based on a longer existing questionnaire, the Patient satisfaction with Out-of-hours Care (PSOC) as described on pages 12-17. Such a standardised questionnaire will help providers of out-of-hours services to conduct surveys and allow comparisons across providers (The Scottish Office 1998, Department of Health 2004). The authors state that the dimensions assessed by the SQOC are not specific to the UK and are likely to be of importance in a wide range of settings including international evaluations. The SQOC has been widely used by out-of-hours co-operatives following its adoption in the UK (Salisbury et al. 2005).

b Principal component analysis was undertaken but data were not provided .

Description

The SQOC comprises seven questions with one or two questions substituting for each of the multi-item scales for different components of satisfaction on the longer questionnaire (Salisbury 1997).

The longer PSOC comprises 32 questions that cover seven scales of satisfaction. Respondents are asked to agree or disagree with a series of similar statements phrased in different ways, with some worded positively and some worded negatively. The development of the SQOC followed a review of existing questionnaires (Lewis 1994; McKinley et al. 1997; Wensing et al. 1994; Hoult 1998; Salisbury 1997; Hopton et al. 1996). The initial questionnaire was designed to address the range of issues in provision of out-of-hours primary care identified in earlier qualitative and quantitative research as most important to patients (Lewis 1994). The seven SQOC items include explanation, getting through on the telephone, manner of doctor or nurse, overall satisfaction, time to wait, treatment or advice and way initial call was handled

Four versions of the SQOC were developed with different scaling formats. A five-point all-point-defined scale (very satisfied, satisfied, neutral, dissatisfied, very dissatisfied); B ten-point all-point-defined numerical scale (1=very dissatisfied to 10 = very satisfied); C five-point all-point-defined scale (very satisfied, satisfied, neutral, dissatisfied, very dissatisfied) with smiley faces above the scale; and, D five-point all-point defined scale (very poor, poor, uncertain, good, excellent).

An electronic version of the questionnaire is available from http://www.phc.bris.ac.uk/phcdb/pubpdf/pubs/SOOC_Questionnaire.doc. An instruction package describing issues such as sample size and survey administration has been designed, along with a computer programme to assist in data entry and analysis, to provide a convenient package for service organisations. The seven items are summed and transformed to a 0-100 scale where 100 is the highest possible satisfaction. If one response is missing the mean score for the remainder is imputed. Scale scores are not computed if more than one item is missing.

Patients

Pilot studies of the draft questionnaire were carried out in three sites in Scotland following which some minor changes of wording were made. The distribution of item responses was skewed strongly towards high levels of satisfaction. Therefore three new versions with different response formats were developed in order to improve the response distributions of the items.

The main survey was conducted in a general practice co-operative providing out-of-hours care for the 139,000 patients of its 77 GPs'. The cooperative covers a range of urban, suburban and rural areas, with some areas of affluence and deprivation. Patients who contacted the cooperative during a 6-week period in July and August 2003 were eligible. Calls were excluded if the doctor felt that a questionnaire would cause distress, if a questionnaire had already been sent to a household, or if address details were incomplete. The sample comprised 1,906 patients who were mailed a questionnaire. Using computer generated randomisation consecutive patients

(n=1306) who contacted the cooperative were randomly allocated to be sent one of the four versions of the short questionnaire or the original longer questionnaire the PSOC, in the form specific to the type of contact; home visits, primary care centre based care and telephone advice.

Another group of consecutive patients (n=600) who contacted the cooperative were asked to complete both the original version (A) of the short questionnaire and the appropriate version of the long questionnaire. Questionnaires were mailed by the cooperative within seven days of the initial patient contact. Reminders were sent after 14 days. The response rate was 45.7% (342/748) for patients sent the short questionnaire, 41.9% (234/558) for patients sent the long questionnaire and 39.7% (238/600) for patients sent both questionnaires. There were 579 and 468 short and long questionnaires available for analysis. Significantly (p<0.05) more scale scores were calculable for the short questionnaire; 43.0% (322/748) compared to 36.4% (203/558).

Mean scale scores (sd) ranged from 75.9 (23.6) to 80.0 (21.0) with and average of 77.5 (22.8) for the four different versions of the SQOC. The four versions had similar responses skewed towards higher levels of satisfaction with marked ceiling effects. The four versions did not have significantly different mean scores or response distributions.

Reliability

Item-total correlation was not assessed. Cronbach's alpha for the four different versions of the SQOC ranged from 0.88-0.94 with an average of 0.92 (Table 4). Test-retest reliability was not assessed.

Validity

Content validity was not assessed. Construct validity was assessed by comparing responses to the seven items with an overall satisfaction item, responses to the longer questionnaire and sociodemographic variables and contact type. The correlations with the overall satisfaction item were: getting through on the telephone 0.64, way initial call was handled 0.73, time to wait 0.73, manner of doctor or nurse 0.79, explanation 0.81 and treatment or advice 0.84. The intraclass correlation coefficients for corresponding scales on the short and long questionnaires (n=233) were: explanation 0.45, getting through on the telephone 0.54, manner of doctor or nurse 0.45, overall satisfaction 0.50, time to wait 0.39, treatment or advice 0.40 and way initial call was handled 0.38.

There were no formal hypotheses relating to the comparisons with age and gender. There was a very small difference for gender and older patients reported greater levels of satisfaction which is consistent with previous findings (Crow et al. 2002). Statistical significance was not reported. Finally, lower levels of satisfaction were found for telephone advice compared to home visits. It was stated that this was consistent with previous research but no evidence was provided to support this.

Commentary

The SQOC is a shortened version of the PQOC. Individual items within the SQOC are designed to represent the scales within the PQOC. The questionnaire is brief comprising just seven items. The items sum to produce a single score or scale of satisfaction. However, the structure of the questionnaire has not been assessed using factor or principal component analysis and hence there is limited empirical support for the summing of items to form a uniltidimensional scale of patient satisfaction. Furthermore item-total correlations were not reported. The different versions of the questionnaire produced good levels of Cronbach's alpha which is evidence for the internal consistency reliability of the instrument.

Attempts were made to improve the response distribution of the items through the testing of different scaling methods, the data remained skewed with ceiling effects for high levels of satisfaction. The authors recommend the use of version C with a five-point all-point-defined scale with smiley faces which they state offers the best combination of response rates, score distribution and Cronbach's alpha.

Construct validity was assessed through comparisons with the longer questionnaire, the PQOC, on which the SQOC is based. This comparison of a short- and longer form questionnaires is often referred to as criterion validity, the aim being to replicate the results of the longer form with a shorter form questionnaire (Streiner & Norman 2005). However, the correlations between the two sets of responses were at best only moderate which suggests that the new SQOC lacks validity. The SQOC comprises single items which are known to have poorer reliability than multi-item scales, which may be one of the reasons for the poor level of correlation with the parent measure.

The results of the remaining tests of construct validity were more encouraging with moderate to large levels of correlation with overall satisfaction and while there were no a priori hypotheses, the comparisons with age and gender were in accordance with findings within the wider patient satisfaction literature.

The SQOC is the only questionnaire that was assessed for responsiveness to changes in patient satisfaction. However, this was not a true test of responsiveness since it did not involve repeat administrations of the questionnaire following some changes in service provision that are known to be related to patient satisfaction levels. Rather, the proportion of respondents who were very satisfied for each item were classified by whether the patient was, or was not, happy with the type of services received, and also their SQOC scale score. All the differences between the two groups who said that they were or were not happy with the setting in which care was provided were statistically significant (p<0.001).

Tabell 4: Short Questionnaire for Out-of-hours Care (SQOC) (n=322). Questionnaire content, descriptive statistics and reliability.

Scale	/ item ^a	Missing data (%)	Mean (sd)	Factor analysis - eigenvalues / loadings	Cronbach's alpha (scale) / item-total correlation	Test-retest correlation
SOOC	scala	5.85 ^b	77.5 (22.8) ^c		0.92 ^d	
8	Getting through on the telephone	5.05	//.5 (22.0)		0.92	
9	Way initial call was handled					
10	Time to wait					
11	Manner of doctor or nurse					
12	Explanation					
13	Treatment or advice					
14	Overall satisfaction					

a The seven items are summed and transformed to a 0-100 scale where 100 is the highest possible satisfaction. If one response is missing the mean score for the remainder is imputed. Scale scores are not computed if more than one item is missing.

4.2.4 Patient satisfaction questionnaire for use with out-of-hours care in the Netherlands

Purpose

The questionnaire was developed to assess patient satisfaction with current out-of-hours care organised in general practitioner (GP) cooperatives, and to assess factors associated with this satisfaction in the Netherlands. The authors state that the questionnaire has potential for use as a standardised instrument for assessing satisfaction in research or service monitoring (van Uden et al. 2005).

Description

The questionnaire was developed following a review of an existing questionnaire (McKinley et al. 1997) and unpublished Dutch questionnaires, and interviews with GPs and health care managers for out-of-hours primary care. In the process of determining relevant aspects of out-of-hours care to patients, patient organisations were consulted and discussions on out-of-hours care in newspapers were studied.

Items were developed and sent to patient organisations, health insurance funds and five GP cooperative organisations for critically review, and to add or remove items if they considered it necessary. The questionnaire was then modified and assessed for clarity by five people with experience of out-of-hours primary care.

Three questionnaires were constructed for each type of consultations: telephone advice, consultation at the cooperative and home visit. Items were scaled using a five-point scale of strongly agree, agree, neutral, disagree, strongly disagree.

Principal components analysis (PCA) with varimax rotation was used to assess whether the items measured similar aspects of patients' satisfaction. Nine scales

b Missing data for items ranged from 1.46 - 5.85.

c Mean scale score across all four versions. Mean (sd) scale scores for versions A, B, C, D were 77.5 (24.5), 77.3 (22.0), 75.9 (23.6) and 80.0 (21.0) respectively.

d Average Cronbach's alpha for the four different versions. Cronbach's alphas' for versions A, B, C, D were 0.91, 0.88, 0.94 and 0.93 respectively.

were identified but it is not stated that they were supported by the results of PCA. Two scales were merged though no reason is given for this. Four scales are applicable to all three types of contact: accessibility by phone (3 items), doctor's assistant's attitude (5 items), questions asked by the doctors assistant (2) and urgency of compliant (2). The scale of treatment by the GP (6) was applicable to two types of contact; consultation and home visit. The scale of advice given by doctor's assistant (5) was applicable to telephone only contact. The three scales waiting time at cooperative (2), waiting room (2) and distance to cooperative (2) were applicable to consultation at the GP cooperative only. The scale waiting time until GP arrives was applicable to home visits only.

Scale scores are calculated by summing item responses and are scaled from 0-100 where 100 is the highest level of satisfaction.

Patients

Questionnaires were mailed to 2,805 patients aged over 0 years three weeks after they had contacted the GP cooperative from March to June 2003. Patients were sampled across the GPs' within this period. Every fourth patient who received telephone advice only and those who attended the GP cooperative, was randomly selected. There was a small number of home visits and so all 150 patients who were visited by a GP from the cooperative, prior to the moment of sampling received a questionnaire. The time between contact with the cooperative and receipt of the questionnaire was not more than three weeks.

The sample size was based on previous research (McKinley et al. 1997) and a 50% response rate which required the mailing of 2,805 questionnaires. There were 450 questionnaires sent out for each region; 150 to patients who received only telephone advice, 150 to patients who visited the GP cooperative, and 150 to patients who received a home visit. Reminders were mailed after three to four weeks. Additional questionnaires were mailed for one of the regions: 1005 questionnaires were equally distributed among the three types of patient contact with the GP cooperative. There were no reminders.

Seventy-two of the 2805 questionnaires were excluded, either because the address was incorrect, the patient had died, or the patient was sent a second questionnaire. Of the 2733 patients who received a questionnaire, 1160 (42.4%) responded. Generally more women responded to the questionnaire, and about three-quarter of the respondents had public health insurance. The age of respondents of those who received telephone advice only was comparable with those who attended the GP cooperative for a consultation. The respondents who received a home visit were generally older; two-third was over sixty years of age. None of these differences were statistically tested.

The response rates for patients receiving telephone advice only, a consultation and home visit were 40.3%, 43.0% and 44.5% respectively. Of the respondents receiving telephone advice only, 148 (42.3%) were male and included 127 (35.5%), 96 (26.8), 67 (18.7%), 68 (19.0%) for the age groups 0-20 years, 21-40 years, 41-60 years and 60 years and over respectively. Of the respondents who had been to consultation at the

GP cooperative, 159 (48.5%) were male and included 146 (39.0%), 81 (21.7), 82 (21.9%), 65 (17.4%) for the age groups 0-20 years, 21-40 years, 41-60 years and 60 years and over respectively. Of the respondents who received a home visit, 177 (46.0%) were male and included 9 (2.3%), 26 (6.6), 93 (23.8%), 263 (67.3%) for the age groups 0-20 years, 21-40 years, 41-60 years and 60 years and over respectively.

Four weeks after the reminder, a random sample of 100 non-respondents were contacted by phone to ask about their reasons for non-response and their opinion on the contact they had with the GP cooperative. This was performed during office hours over a three-week period. For the 63 (63.0%) that were contactable 35 (55.6%) were male and 28 (44.4%) were female. Many stated that they had forgotten to return the questionnaire (40%) while a minority said they were not interested (6.7%) or did not find it needful (6.7%). Most (46.7%) gave other reasons including lack of time, too difficult, or had lost the questionnaire. Around 71 % reported to be satisfied or very satisfied with the care they received. It was stated that there was not much of a difference in the overall satisfaction of non-respondents and respondents, however, data and statistical significance were not given.

Reliability

Item-total correlation was not assessed. The six scales for telephone advice had Cronbach's alpha coefficients' were between 0.64 and 0.93 (Table 5). The nine scales for consultation at the GP cooperative had Cronbach's alpha coefficients' between 0.62 and 0.93 (Table 6), and the seven scales for home visit had Cronbach's alpha coefficients' between 0.73 and 0.96 (Table 7). Test-retest reliability was not assessed.

Validity

Validity was not formally assessed. However, an additional three-item scale of overall satisfaction was regressed on the questionnaire scales and sociodemographic variables, with subscale satisfaction scores as covariates.

Separate analyses were conducted for three types of contact. The scales that made a significant contribution to the overall satisfaction of patients receiving telephone advices included: accessibility by phone, doctors assistants attitude and doctors assistants advice. The scales that made a significant contribution to the overall satisfaction of patients who went for consultation to the GP cooperative included: accessibility by phone, doctors assistants attitude, urgency own complaint, waiting time, distance to cooperative and GP's treatment. The scales that made a significant contribution to the overall satisfaction of patients who received a home visit from a GP from the cooperative included: accessibility by phone, doctors assistants attitude, GP's treatment and waiting time until GP arrives.

Commentary

The development of the questionnaire was based on a review of existing questionnaires, interviews with GPs and health care managers and consultation with patient organisations. Patient interviews were not used to determine relevant issues for the questionnaire which may limit the content validity of the questionnaire in terms of its inclusion of issues that are important to patients.

The levels of missing data at the item and scale level were not reported. The mean scale scores are provided, however, they are not commented upon. Item-total correlation was not assessed. The levels of Cronbach's alpha were below 0.7 for one of the scales within the telephone advice questionnaire and for three of the scales within the consultation at the cooperative questionnaire. Principal component analysis was used, however, the extent to which it informed scale development is not clearly stated. Therefore it is not clear whether the scales have good empirical support in terms of internal construct validity. There was no formal assessment of validity including content and construct validity.

Tabell 5: Patient satisfaction questionnaire for use with out-of-hours care in the Netherlands (n=1106). Telephone advice scales, descriptive statistics and reliability.

Scale / item Telephone advice	Missing data (%)	Mean (sd) ^a	Factor analysis - eigenvalues / loadings	Cronbach's alpha (scale) / item-total correlation	Test-retest correlation
Accessibility by phone Ease of finding phone number Easy to get through Time to answer phone		76.5 (18.9)		0.72	
Doctor's assistants attitude Friendliness on phone Enough time to talk on phone Understood my problem Took my problem seriously Information was clear		72.8 (22.1)		0.91	
Questions asked by doctors assistant Asked too many questions Annoyance at not starting with problem		58.6 (25.4)		0.64	
Advice given by doctors assistant ^e Information about my problem was good Advice was very useful Advice reassured me Advice was sufficient Assistant was right to give me advice only		53.7 (27.3)		0.93	
Urgency of complaint I believed my problem was very severe I thought my problem needed immediate care		69.1 (24.5)		0.86	
Overall satisfaction Contact with the GP cooperative Time it took to help me GP cooperative functions very well		64.2 (26.1)		0.93	

a Scale scores range from 0 to 100, where 0 represents very dissatisfied and 100 represents highly satisfied

Tabell 6: Patient satisfaction questionnaire for use with out-of-hours care in the Netherlands (n=1106). Consultation at the GP cooperative scales, descriptive statistics and reliability.

Scale / item	Missing data (%)	Mean (sd) ^a	Factor analysis - eigenvalues / loadings	Cronbach's alpha (scale) / item-total correlation	Test-retest correlation
Consultation at the GP cooperative Accessibility by phone Ease of finding phone number Easy to get through		79.3 (17.6)		0.73	
Time to answer phone Doctor's assistants attitude Friendliness on phone Enough time to talk on phone Understood my problem Took my problem seriously Information was clear		79.8 (16.3)		0.88	
Questions asked by doctors assistant Asked too many questions Annoyance at not starting with problem		63.5 (23.0)		0.65	
Urgency of complaint I believed my problem was very severe I thought my problem needed immediate care		72.0 (21.5)		0.79	
Waiting time at the cooperative Had too long to wait at registration Had too long to wait before seeing doctor		61.5 (25.8)		0.62	
Waiting room There was enough material to entertain The room was very clean		65.6 (20.3)		0.60	
Distance to the GP cooperative Travel time too long GP cooperative is easily accessible		66.7 (21.2)		0.75	
Treatment by the GP GP took my problem seriously GP was friendly GP gave me clear information GP gave me useful advice GP had enough time for me I was very pleased with my treatment		81.0 (18.9)		0.93	
Overall satisfaction Contact with the GP cooperative Time it took to help me GP cooperative functions very well		73.7 (19.8)		0.88	

a Scale scores range from 0 to 100, where 0 represents very dissatisfied and 100 represents highly satisfied

Tabell 7: Patient satisfaction questionnaire for use with out-of-hours care in the Netherlands (n=1106). Home visits scales, descriptive statistics and reliability.

Scale / item	Missing data (%)	Mean (sd) ^a	Factor analysis - eigenvalues / loadings	Cronbach's alpha (scale) / item-total correlation	Test-retest correlation
Home visit Accessibility by phone Ease of finding phone number Easy to get through Time to answer phone		80.9 (18.4)		0.86	
Doctor's assistants attitude Friendliness on phone Enough time to talk on phone Understood my problem Took my problem seriously Information was clear		80.6 (18.6)		0.90	
Questions asked by doctors assistant Asked too many questions Annoyance at not starting with problem		59.2 (26.6)		0.73	
Urgency of complaint I believed my problem was very severe I thought my problem needed immediate care		86.7 (16.0)		0.78	
Treatment by the GP GP took my problem seriously GP was friendly GP gave me clear information GP gave me useful advice GP had enough time for me I was very pleased with my treatment		84.4 (19.7)		0.96	
Waiting time until GP arrives I thought it took too long for the GP to arrive		60.0 (30.7)		-	
Overall satisfaction Contact with the GP cooperative Time it took to help me GP cooperative functions very well		74.6 (22.4)		0.92	

a Scale scores range from 0 to 100, where 0 represents very dissatisfied and 100 represents highly satisfied

5 Oppsummering

Formålet med litteraturgjennomgangen har vært å finne validerte spørreskjema for å måle pasienterfaringer med legevakt i primærhelsetjenesten. Vi utviklet to søkestrategier og søkte i relevante elektroniske databaser. Det første søket, *med* validitet og reliabilitet, gav 253 treff. Det andre søket, *uten* validitet og reliabilitet, resulterte i 2508 referanser. Etter å ha lagret referansene i databaser og vurdert dem etter bestemte kriterier (Garratt et al. 2002a, Sitzia 1999), endte vi med å inkludere fire validerte spørreskjema i litteraturgjennomgangen. To av spørreskjemaene er utviklet i England og to i Nederland.

McKinley et al.s (1997) spørreskjema, Patient satisfaction with Out-of-hours Care (PSOC), består 32 spørsmål. Spørsmålene utgjør sju skalaer for ulike dimensjoner av pasienttilfredshet med legevakt. Det er også en skala for generell tilfredshet. Det er brukt 5-punkt svarskala. Salisbury et al.s (2005) spørreskjema, Short Questionnaire for Out-of-hours Care (SQOC), er basert på McKinley et al.s spørreskjema, og er en forkortet versjon av dette. Spørreskjemaet består av sju spørsmål hvor hvert spørsmål skal erstatte ett av de sju områdene (skalaene) i den lengre versjonen av spørreskjemaet. Det er brukt 5-punkts svarskala.

Moll van Charante et al.s (2006) spørreskjema er tredelt, det vil si at det består av tre separate spørreskjema; et for pasienter som har hatt telefonkonsultasjon, et for pasienter som har vært på legesenter og et for pasienter som har fått legen hjem til seg. Antall spørsmål varierer etter type kontakt, og består av henholdsvis 14, 29 og 23 spørsmål. Alle spørsmålene bruker 10-punkts svarskala. Det siste spørreskjemaet vi har tatt med i litteraturgjennomgangen er det CJT van Uden et al. (2005) som har utviklet. Også dette består av tre spørreskjema etter ulike typer av lokalisering (telephone advice, consultation at the GP cooperative og home visit). Antall spørsmål og skalaer (dimensjoner) varierer etter lokalisering, men de generelle spørsmålene er felles. Det er brukt 5-punkts Likert- svarskala.

Litteraturgjennomgang, kvalitative intervjuer og pilotundersøkelser har i ulik grad inngått i arbeidet med utviklingen med spørreskjemaene, men det er kun McKinley et al. og Moll van Charante et al. som har intervjuet pasienter i den forbindelse.

McKinley, Moll van Charante og Van Uden har brukt principal component analysis (PCA) for å underbygge spørsmåls- og skalakonstruksjoner, mens Salisbury ikke har brukt verken PCA eller faktoranalyse til dette.

Svarprosenten varierer etter hvilken type undersøkelse og spørreskjema som er brukt. I hovedundersøkelsen (main survey) til McKinley et al. ble det sendt ut 1466 spørreskjema og 1402 av disse ble returnert, noe som gav en svarprosent på 95.6. Andel manglende data (missing data) er ikke oppgitt. Moll van Charante et al. sendte i sin hovedundersøkelse ut 14000 spørreskjema og fikk 7520 svar. Det gav en svarprosent på 52,2. Det ble sendt spørreskjema til i alt 1906 pasienter i hovedundersøkelsen til Salisbury et al. Svarprosenten var 45.7% (342/748) for pasienter som fikk det korte spørreskjemaet, 41.9% (234/558) for de som fikk det lange spørreskjemaet og 39.7% (238/600) for de som fikk tilsendt begge. Van Uden et al. sendte ut til sammen 2733 spørreskjemaer og 1160 av disse svarte, noe som gav en svarprosent på 42.4. Manglende svar (missing data) er ikke oppgitt.

McKinley et al. vurderte spørreskjemaets reliabilitet ved å se på intern konsistens (internal consistency) og gjøre en test-retest. Moll van Charante et al. målte spørsmål-skala-korrelasjonen og gjennomførte en test-retest, mens Salisbury et al. ikke vurderte spørsmål-skala-korrelasjon, men oppgir Cronbachs alfa-verdier for de fire versjonene av spørreskjemaet de testet. Van Uden et al. vurderte også Cronbachs alfa, men spørsmål-skala-konstruksjon eller test-retest-reliabilitet ble ikke vurdert.

Innholdsvaliditeten (content validity) ble ifølge McKinley et al. ivaretatt i utviklingsprosessen av spørreskjemaet, mens begrepsvaliditeten (construct validity) ble sikret gjennom enkeltspørsmål-skala-korrelasjon (inter-scale correalations). Moll van Charante et al. mener også at innholdsvaliditeten ble ivaretatt i spørreskjemaets utviklingsfase, i tillegg til at bruken av principal component analysis (PCA) støtter opp om strukturen i spørreskjemaet. Det ble ikke gjort noen formell testing av begrepsvaliditeten. Salisbury et al. har ikke vurdert innholdsvaliditeten, mens begrepsvaliditeten ble vurdert ved å sammenligne svar på sju spørsmål med et generelt tilfredshetsspørsmål, svar på den lange versjonen av spørreskjemaet, sosiodemografiske variabler og etter type kontakt. Van Unden et al. har ikke formelt vurdert spørreskjemaets validitet, men kjørte en regresjon med sosiodemografiske variabler, en skala bestående av generelle tilfredshets-spørsmål og alle skalaene (dimensjonene) i spørreskjemaet.

Tabell åtte er en oppsummering av tilgjengelig informasjon om utviklingen av de fire spørreskjemaene.

Tabell 8: Development stages and patients characteristics.

Questionnaire (country)	Development stage	Setting	Final n (response rate %)	Age range	Female (%)	Ethnic origin white (%)
Patient Satisfaction with Out- of-Hours Care (UK)	Focus groups	Patients and carers from general practice registers and community groups	11		63.6	54.6
	Semi-structured interviews	Patients receiving out-of-hours care from 2 large city practices or deputising service	28		61	86
	Preliminary interviews	Patients receiving out-of-hours care from 2 large city practices or deputising service	41		51	87
	Postal pilots	Within 72 hours of patients or carers receiving out-of-hours care at seven practices	378		59	81
	Main survey interviews	Within 24-129 hours of patients receiving out- of-hours care at fourteen practices	1402 (95.6)		57	89
	Test-retest	Return of a second questionnaire the same day as the main survey	112 (56.0)			
Patient satisfaction questionnaire for assessing large-scale out-of-hours primary health care in the Netherlands		Patients from a regional patient federation (n=6)				
	Postal pilot	Patients within 48 hours of request for care	285 (41.0)			
	Review of items	Patients recently contacting a cooperative (n=13)				
	Postal pilot		87 (48.3)			
	Main postal survey	26 GP cooperatives covering 25% of the Dutch population sent questionnaires to 200 patients within 48 hours of contact	7520 (52.2)		53.7	
	Test-retest	Respondents from one cooperative from the main survey mailed at one week	155 (45.9)			
SQOC (UK)	Pilot studies	Three sites in Scotland				
	Main postal survey	Patients from a single GP cooperative mailed a questionnaire within 7 days	342 (45.7)			
Patient satisfaction questionnaire for use with out- of-hours care in the Netherlands	Main postal survey	Patients contacting GP cooperatives in regions in the South of the Netherlands mailed questionnaire within 3 weeks	1160 (42.4)			

5.1 KONKLUSJON

Vi identifiserte fire validerte måleinstrumenter. I et eventuelt utviklingsprosjekt kan det være nyttig å ta utgangspunkt i disse når spørsmål og dimensjoner for pasienterfaringer med legevakt skal bestemmes. Etter vår oppfatning er McKinley et al.s spørreskjema spesielt nyttig for et eventuelt norsk utviklingsprosjekt. Dette spørreskjemaet har blitt brukt i flere undersøkelser, enten i originalversjon, eller i Salisburys (1997) videreutviklede utgave (Shipman et al. 2000, Smith et al. 2001, Glynn et al. 2004, Pickin et al. 2004, Thompson et al. 2004). Dette spørreskjemaet er sammen med Salisbury et al.s forkortede versjon de som antakeligvis er de viktigste å ta utgangspunkt i. Vi er likevel fortsatt usikre på måleinstrumentenes

psykometriske egenskaper, og derfor anbefaler vi at det utvikles et spørreskjema for Norge og at det testes etter anbefalte metoder.

Et prosjekt for å utvikle og validere et instrument for å måle pasienterfaringer med legevakt i Norge bør ta utgangspunkt i malen for utvikling og validering av pasienterfaringsskjemaet i PasOpp (Pettersen et al. 2004; Garratt et al. 2005), og som beskrevet i denne rapporten.

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Vedlegg A: Søk med validitet og reliabilitet

Database: CINAHL 1982-2006, EMBASE 1980-2006, Ovid MEDLINE(R) 1966-

2006 og PsycINFO 1967-2006.

Dato: 14.05.2006

Antall treff: Søk *med* reliabilitet og validitet gav 253 treff.

- 1. patient satisfaction.mp. [mp=ti, hw, ab, it, sh, tn, ot, dm, mf, nm, tc, id]
- 2. patient experiences.mp. [mp=ti, hw, ab, it, sh, tn, ot, dm, mf, nm, tc, id]
- 3. emergency\$.mp. [mp=ti, hw, ab, it, sh, tn, ot, dm, mf, nm, tc, id]
- 4. acute.mp. [mp=ti, hw, ab, it, sh, tn, ot, dm, mf, nm, tc, id]
- 5. after hours.mp. [mp=ti, hw, ab, it, sh, tn, ot, dm, mf, nm, tc, id]
- 6. out of hours.mp. [mp=ti, hw, ab, it, sh, tn, ot, dm, mf, nm, tc, id]
- 7. night care.mp. [mp=ti, hw, ab, it, sh, tn, ot, dm, mf, nm, tc, id]
- 8. out-of-hours care\$.mp. [mp=ti, hw, ab, it, sh, tn, ot, dm, mf, nm, tc, id]
- 9. after-hours primary medical care services.mp. [mp=ti, hw, ab, it, sh, tn, ot, dm, mf, nm, tc, id]
- 10. (questionnaire\$ or survey\$ or instrument\$ or tool\$ or measure\$).mp. [mp=ti, hw, ab, it, sh, tn, ot, dm, mf, nm, tc, id]
- 11. (reliab\$ or valid\$).mp. [mp=ti, hw, ab, it, sh, tn, ot, dm, mf, nm, tc, id]
- 12. 1 or 2
- 13. 3 or 4 or 5 or 6 or 7 or 8 or 9
- 14. 10 and 11 and 12 and 13
- 15. remove duplicates from 14

Vedlegg B: Søk uten validitet og reliabilitet

Database: CINAHL 1982-2006, EMBASE 1980-2006, Ovid MEDLINE(R) 1966-

2006 og PsycINFO 1967-2006.

Dato: 14.05.2006

Antall treff: Søk *uten* reliabilitet og validitet gav 2503 treff.

- 1. patient satisfaction.mp. [mp=ti, hw, ab, it, sh, tn, ot, dm, mf, nm, tc, id]
- 2. patient experiences.mp. [mp=ti, hw, ab, it, sh, tn, ot, dm, mf, nm, tc, id]
- 3. emergency\$.mp. [mp=ti, hw, ab, it, sh, tn, ot, dm, mf, nm, tc, id]
- 4. acute.mp. [mp=ti, hw, ab, it, sh, tn, ot, dm, mf, nm, tc, id]
- 5. after hours.mp. [mp=ti, hw, ab, it, sh, tn, ot, dm, mf, nm, tc, id]
- 6. out of hours.mp. [mp=ti, hw, ab, it, sh, tn, ot, dm, mf, nm, tc, id]
- 7. night care.mp. [mp=ti, hw, ab, it, sh, tn, ot, dm, mf, nm, tc, id]
- 8. out-of-hours care\$.mp. [mp=ti, hw, ab, it, sh, tn, ot, dm, mf, nm, tc, id]
- 9. after-hours primary medical care services.mp. [mp=ti, hw, ab, it, sh, tn, ot, dm, mf, nm, tc, id]
- 10. (questionnaire\$ or survey\$ or instrument\$ or tool\$ or measure\$).mp. [mp=ti, hw, ab, it, sh, tn, ot, dm, mf, nm, tc, id]
- 11. 1 or 2
- 12. 3 or 4 or 5 or 6 or 7 or 8 or 9
- 13. 10 and 11 and 12
- 14. remove duplicates from 13

Nasjonalt kunnskapssenter for helsetjenesten Postboks 7004, St. Olavsplass N-0130 Oslo (+47) 23 25 50 00 www.kunnskapssenteret.no ISBN 82-8121-066-4 ISSN 1890-1565

PasOpp-rapport Nr 6-2006

Nasjonalt kunnskapssenter for helsetjenesten

