

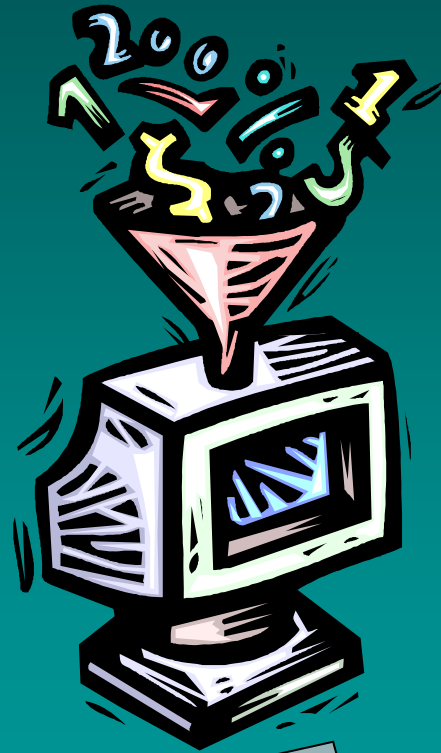
# Technical solutions to move patients self assessed option into an electronic registry system

EyeNet–dagarna 2010  
20th May.

# The problem



Patients opinion/feedback



Analysis of results

How do we digitalize?

# What effects our choices

## Patient?

- Young children
- Young people
- Old people
- Men
- Women
- Affluent/well educated
- Socially disadvantaged
- Physically disadvantaged
- Learning disabled

## Where?

- POC
- Home

## When?

- Before treatment
- During treatment
- After treatment
- Repeatably

## When are the results needed?

- Real time
- Weekly/Monthly/Annually

## Other issues

- Cost/workload?
- Does the process effect the outcome?
- Integration with IT systems?
- Privacy/security

# Methods

- Face to face interviews
- Pen and paper
- Digital pen and paper
- PDA's
- Kiosks
- Bed side
- Online
- Telephone

# Face to face interviews

- Interviews
- Patient stories
- Requires training



## Pros

- Most inclusive
- Qualitative method providing rich source of data
- Dynamic of face-to-face interaction
- Patient stories
- 'Why' issues explored

## Cons

- Takes longer and produces fewer responses
- Requires an investment in training and administration
- Interviewer can have a moderating effect on responses
- **Requires extra step to digitalize**

# Paper based methods

- Pen and paper questionnaires
- Multiple choice questions, rate services/experiences



## Pros

- Cheap, convenient and user friendly
- Obtains large quantities of quantitative data
- When self-administered – produces higher reporting of 'undesirable behaviour' or sensitive information

## Cons

- Use for qualitative data gathering is limited
- Postal questionnaires – poor and slow response rates
- Comment or feedback cards can result in extreme responses
- **Requires extra step to digitalize**

# Digital pen and paper

- Digital pen and paper questionnaires
- Multiple choice questions, rate services/experiences



## Pros

- Benefits of pen + paper
- Collected data already digital

## Cons

- Same as pen + paper
- Pens can disappear
- Can not be used with postal

# Pen demo

- Digital pen from Anoto
- Unique paper pattern
- Pen “strokes” stored in pen
- Transferred to PC
- Pen strokes are interpreted
- Results stored digitally
- Reports
- Smart – email results

**SMART - Demo Formulär**

Svara genom att kryssa i rätt ruta för respektive fråga.

Kön					
Jag är en:	Man		Kvinna		
	<input type="checkbox"/>		<input type="checkbox"/>		


Ålder					
Min ålder är:	< 30 år	31 år – 55 år	> 55 år	Man frågar inte efter en kvinnas ålder	Vet ej
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Längd					
Min längd är	< 165 cm	166 cm till 175 cm	176 cm till 190 cm	> 191 cm	Vet ej
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Favoritfärg					
Min favoritfärg är:	Röd	Blå	Grön	Annan	Vet ej
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Vikt	
Min vikt är:	Lätt
	<input type="checkbox"/>

Detta formulär visar kunder – som sedan enkelt att ta fram ra  
*SMART*eller hur?



DemoFormil. Sida 1(1)

# Hand held devices

- Touch sensitive screen
- Automatic download of responses to database



## Pros

- Generally user-friendly for those using and administering them
- Flexibility to change questions though supplier may charge
- Number of questions vary between devices – from 5 to 20+

## Cons

- Ability to take part but may lead to 'difficult' patients being excluded
- Technology less suited to some groups
- Where assistance is provided respondent loses anonymity
- Mostly quantitative responses

# Kiosks

- A kiosk is a stand-alone touch screen device - larger than a PDA.
- Static within a location.
- Wall mounted or floor mounted



## Pros

- Completion of survey is anonymous
- Sample is self-selected
- Generally user-friendly
- Number of questions variable

## Cons

- Problems for certain groups
- Kiosks are often not visible enough, not explained
- Use will depend on location and functionality
- Time pressures may prevent people from using them
- More....

# Bedside devices

- Touch sensitive screen
- Automatic download of responses to database



## Pros

- Could overcome sampling issues as self-selected
- Could complete through touch screen or telephone
- Could provide incentives for completion, such as credit to use terminals

## Cons

- Quantitative data in the main but where keyboard provided could allow for some free text
- Ability to use mobile phones on wards may affect future use of bedside units
- Expensive to implement

# Telephoning

- Interviewer or self-administered questionnaire using the phone
- Keypad and automatic voice prompts
- Pre-arranged or opportunistically



## Pros

- Response rates can be higher for pre-arranged calls rather than opportunistic calls
- CAT - reduced data errors, speedy analysis of responses and is cost-effective
- Detailed responses can be provided

## Cons

- Low response rates for random digit dialing.
- Can be viewed as intrusive
- Lack of universal coverage for telephone ownership
- *(can) requires extra step to digitalize*

# Online web based

- Online computerised questionnaire
- Emailed directly or posted on the organisation's website.



## Pros

- Higher reporting of sensitive information
- **Allows for more complex questions structures –question branching, routing etc. and use of graphics and other visuals**
- Convenience/speed appeals to many

## Cons

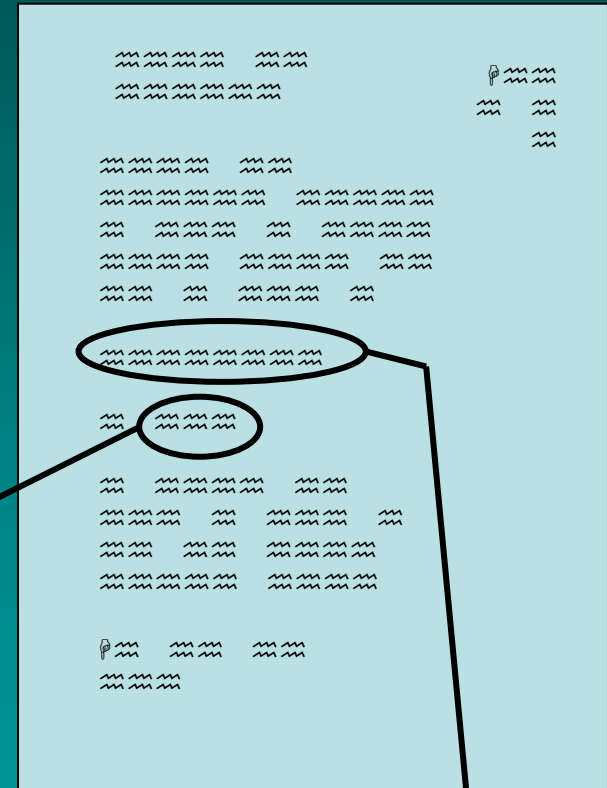
- Patient address/e-mail addresses
- Will not generate high responses among some patient groups
- Internet coverage not universal
- Respondent fatigue more evident – 18 minute drop off point

# Online demo - Catquest

- Catquest SF9
- Follow up after operation
- Patient at home
- Letter with web address and login code

**KMHGRQF**

Unique login code



<http://www.cataractreg.com/catquest/catquest.dll>

# Method v patient group

	Face to face	Paper			Electronic			Telephone Interview
	POC	POC	Postal	Digital pen	Hand held devices	Touch screens	Online Web based	
Young children	High				x	x	x	
Young people	High							x
Older people	High	High	High	High	x	x	x	
Men							High	
Women							Low	
Affulent /Well educated							High	
Less well educated		High		High				
Socially disadvantaged	High				x	x	x	x
Physically challenged	High				x	x		
Learning difficulties	High	x			x	x	x	

High/Low - Suitable

x - Not suitable

# Method v criteria

	Face to face	Paper			Electronic			Telephone Interview
	POC	POC	Postal	Digital pen	Hand held devices	Touch screens	Online Web based	
Volume response		YES		YES	YES			POSSIBLE
Quantative data		YES	YES	YES	YES	YES	YES	YES
Qualitive data	YES	POSSIBLE						POSSIBLE
Speed				YES	YES	YES	YES	YES
Low cost	NO	YES	YES	YES				
Inclusivity	YES	YES	YES	YES	YES			YES
User friendly	YES	YES	YES	YES	YES	YES	YES	YES?
Report of sensative Issues	POSSIBLE	POSSIBLE	YES	POSSIBLE				POSSIBLE
Integration				YES	YES	YES	YES	YES

 Direct integration with electronic archive

# Summary

- Most important - the patient group
- Think about
  - when, where, how fast
- Flexibility
- Integration to other systems
- Other factors such as  
anonymity/privacy/security

# Thank you

*Technical solutions to move patients self assessed  
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