

IT i Sundhedsvæsenet

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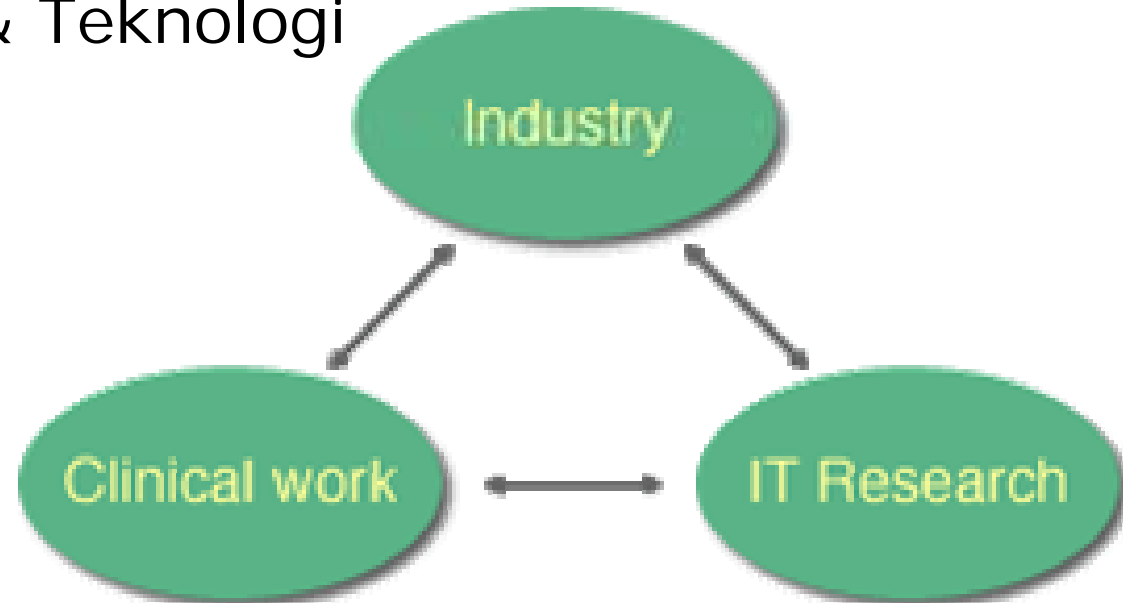
Datalogisk Institut,

Aarhus Universitet



Agenda

- Udfordringer for sundhedsvæsenet
 - Hospitaler
 - Ældre
- (Forretnings-)Muligheder
- Center for Pervasive Healthcare
 - Forskning & Teknologi
 - Projekter



Udfordringer - Hospitaler

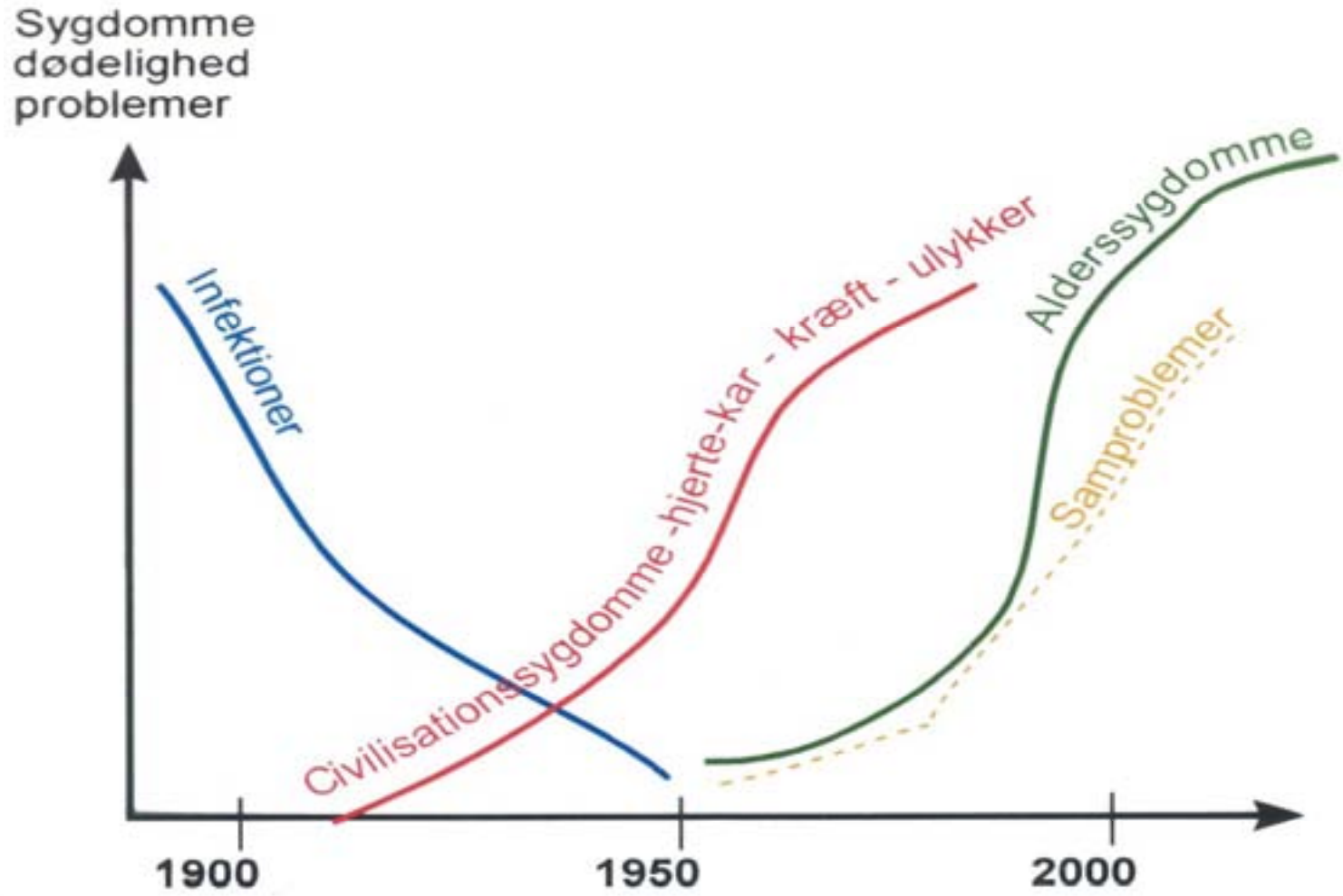
- EPJ – bygger på standard (kontor) teknologi
- Ingen støtte til
 - Mobilitet
 - Samarbejde
 - Heterogene devices
 - Multiple, korte og parallelle sessioner
 - Digital og fysisk interaktion







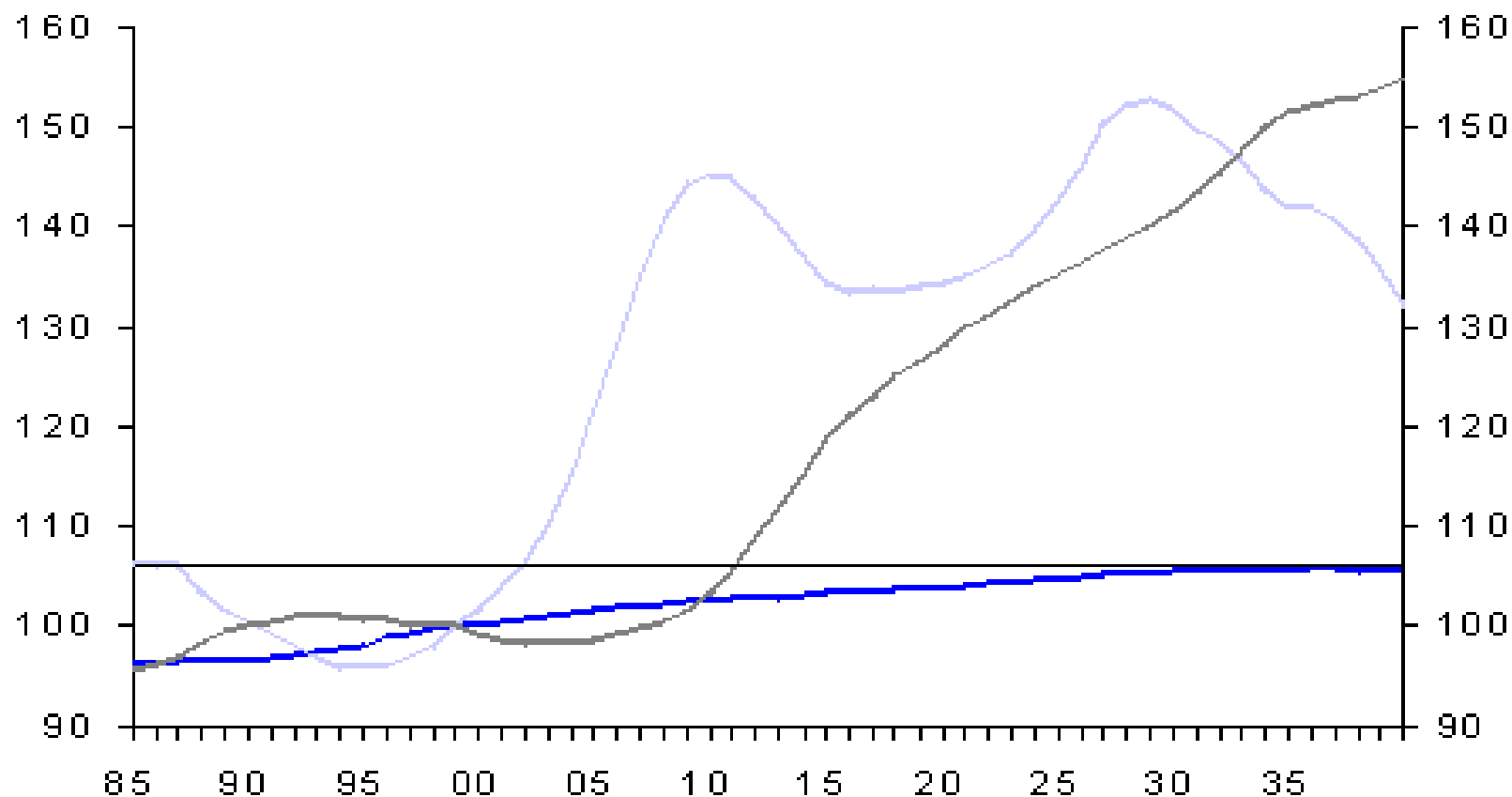
Udfordringer – ældre



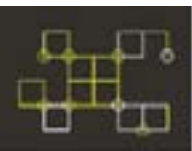
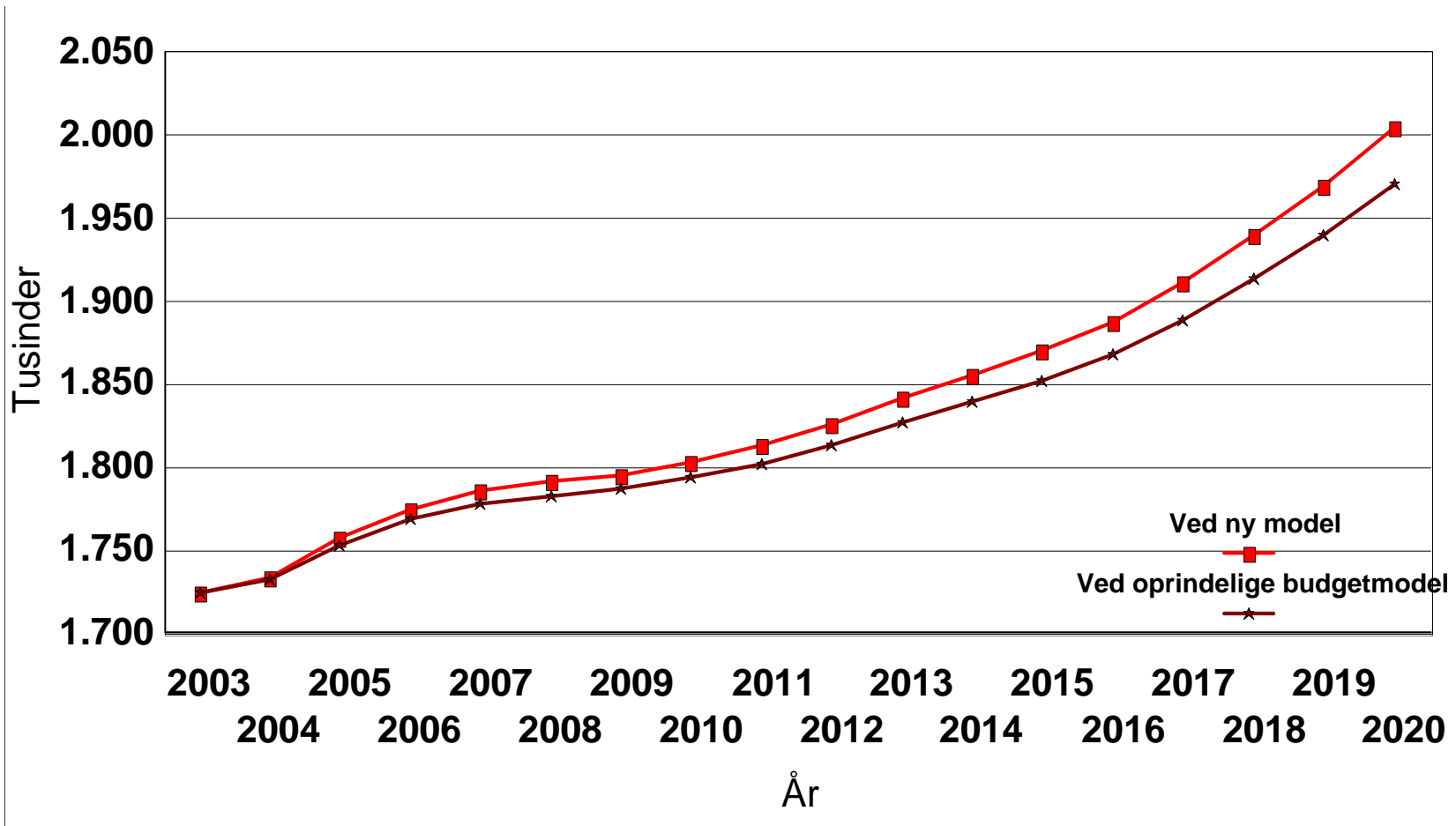
Andel af befolkningen

Indeks 1998=100

Indeks 1998=100



Udgifter



(Forretnings-)Muligheder

- Forbedringer af produkter
 - EPJ
 - PACS
 - Booking, planlægning, koordinering, kaldeanlæg, ...
- Nye forretningsområder
 - "Home Care" – Telemedicinsk behandling i hjemmet
 - Præ-hospital indsats



Center for Pervasive Healthcare

Centre for Pervasive Healthcare

www.cfph.dk



ISIS Katrinebjerg

Forskning – Teknologi

- Activity-Based Computing
 - Proximity-based user authentication
 - Composite Devices
 - Wearable Computing
- Context Aware Computing
 - Aware Phone
- Medical Visualization and Simulation
- Multi-modal Interaktion



Forskning – Studier

- Telemedicinsk måling af blodtryk
 - Se stand på udstillingen
- Telemedicinsk behandling af patienter med diabetiske sår
- Socio-tekniske analyser af implementationen af EPJ i Århus



Projekter

- Den interaktive operationsstue
 - Medical Insight (PACS)
 - Horsens Sygehus
- IT-støtte til ulykker
 - Systematic (EPJ + forsvar)
 - Århus Sygehus, Politiet, Brandvæsnet
- Telemedicinsk behandling af sår
 - Systematic (EPJ)
 - Århus Sygehus





Den interaktive operationsstue

Centre for Pervasive Healthcare

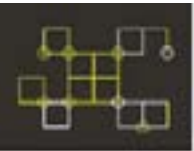
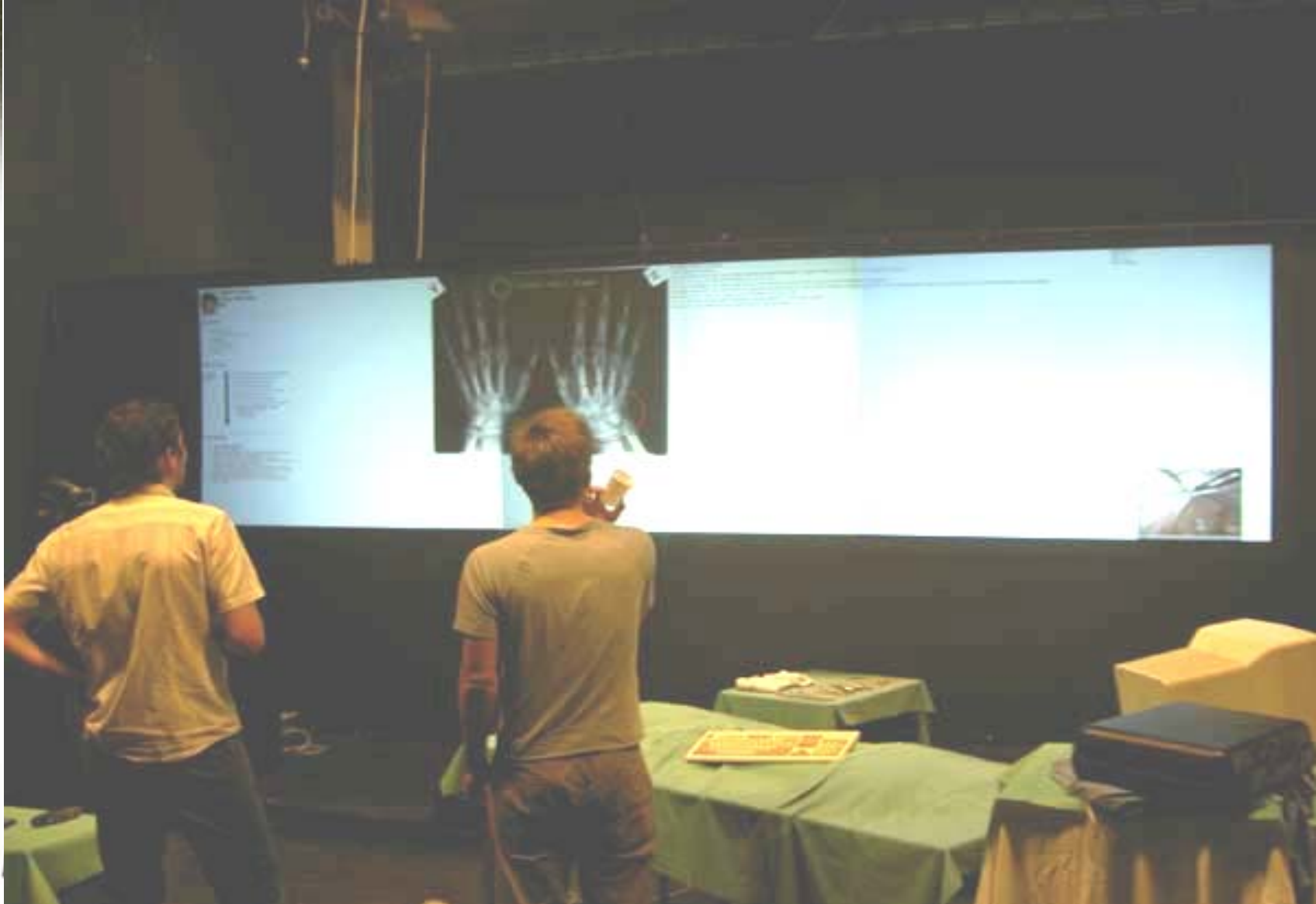
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Prototype

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Multi-modal Interaktion



Intelligente handsker

- Handsker
 - indbygget sensorer
 - ved hvad der røres ved
 - trådløse
- Anvendelse
 - context-awareness
 - kommandoer
 - optælling
 - uddannelse



IT-støtte til Ulykker



Wearable Computing



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Telemedicinsk Behandling af Sår

- Almindelig komplikation for diabetes 2 patienter
- Tidskrævende
 - 5-7 uger på et hospital
- Bedre behandling i eget hjem
- Mangel på
 - koordinering
 - viden i primær sektoren
 - prestige





Kontaktinformation

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 - WWW.CfPH.DK
 - Udstilling på SUMMIT05



The screenshot shows the website for the Centre for Pervasive Healthcare. The browser window title is "Centre for Pervasive Healthcare - Microsoft Internet Explorer". The address bar shows "http://www.pervasivehealthcare.dk/". The website has a blue header with the title "Centre for Pervasive Healthcare" and a search box. Below the header is a navigation menu with links: "ABOUT the Centre", "News", "Research", "Projects", "Partners", "People", and "Publications". The main content area features a heading "- applying pervasive computing within healthcare" and a paragraph describing the Centre for Pervasive Healthcare (CFPH) as an interdisciplinary research centre. It lists two bullet points: "for clinicians to use in hospitals" and "for helping citizens to participate closely in taking care of their own health." Below this is a paragraph about the multidisciplinary team and their work. There is a small image of a person in a hospital bed. To the right of the image is a text block about CFPH's research disciplines. At the bottom of the page, there is a logo for "ISIS Katrinebjerg" and a paragraph about the Competence Centre ISIS Katrinebjerg.