Virtual clinic

Understanding service virtualisation

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Outline

- Why
- Where to start
- Models, tools, pathways
- Evidence
- Challenges
- Rotherham Hematology experience
Why ?
Changing paradigms
NHS in 2015

- Changing patients health needs and preferences
- Changes in technology, treatments and care delivery - breaking artificial barriers
- Changes in health services funding growth
**NHS 5 yr forward view**

- Break down the barriers in how care is provided between family doctors and hospitals, between physical and mental health, between health and social care.

- Aim: extra 2% net efficiency/demand saving across its whole funding base each year for the rest of the decade.

Why?

- Patient centered
- Evolution of Clinical Care
- Savings/Efficiency
- Specialist resources to be directed towards patients with more complex needs
Models

- Consultation
- Monitoring
- Education
Models

- Interface between Primary and Secondary Care
- Direct-into patient records
- Pre hospital-In hospital-Post hospital
- Virtual inbox-Common electronic record-Virtual Ward-Telemedicine
Settings

- Clinics
- Hospitals
- Rural
- Prisons
- Nursing homes
THE RADIO DOCTOR—Maybe!

IN THIS ISSUE:
Sir Oliver Lodge, F.R.S.
Dr. J. A. Fleming, F.R.S.
F. W. Dunmore and
F. H. Engel of
Bureau of Standards
Howard S. Pyle
Brainard Foote

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THE 100% RADIO MAGAZINE
Where to start?

- Get the local context
- Identify all stakeholders
- Patient-Provider-Commissioner
- Focus on an initial area-pilot
Stakeholder Perspectives

- Patients with Type 1 DM using insulin pumps
- Focus groups
- One-on-one interviews.
- Patient consensus via email
- Workshop: expert consensus on the use of information technology to improve the care of young people with diabetes was organized.

Stakeholder-themes

- communication between patients and health professionals
- presentation of patient data and permanency of the record
- the importance and value of peer support
- how an Internet-based system would fit with the current provision of care
- an Internet-based system may not be suitable for all people with diabetes
Issues to tackle

- GP participation - need 100% coverage
- IT challenges: ensure secure communication
- Consultant time & job planning
- Robust tracking of patient outcomes
- Recognition of virtual activity
- Quality care & patient ‘safety’ & satisfaction
- Demonstration savings in time, money & resources
Virtual clinic-Rotherham Haematology
Previous Pathway

GP refers patient via Choose and Book

The Consultant rejects, asks for further tests

1. No further contact till GP re-refers back as a new Choose and Book referral
2. No scope to provide continuous advice on monitoring.
Rotherham – initial steps

- CCG
- Trust perspective
- Departmental perspective
Trust perspective

- Ad hoc referrals
- Telephone calls
- Inappropriate referrals
Virtual clinic-Haematology

- Initial meeting
- Steering group
- GP newsletter
- Pilot and evaluation
- Further roll out
Patient/results reviewed by GP in Primary Care

GP refers patient for specialist opinion to Virtual Clinic
1. E-mail
2. Telephone

Consultant reviews referrals electronically

Discharge
Further tests
Re-direct

Re-discuss results via V clinic

Monitor in Primary Care
Out patient appointment
Challenges

- E-mails may not always be picked up within the correct time frame- locum GPs, annual leave, late
- Impact on current clinical provision
- Robust system to track activity.
- Complete coverage of all GP practices: Finance and contracting arrangements
Renal model

- Chronic kidney disease e-consultation service in SystmOne
- E-consultation
- provided nephrologists with access to more clinical information.
- GPs reported that the service was convenient, provided timely and helpful advice, and avoided outpatient referrals.
- Specialist recommendations were well followed, and GPs felt more confident about managing chronic kidney disease in the community.

Palliative Care

- Virtual visits academic center and community-dwelling adults living in rural locations.
- 3G-enabled Apple iPad, cellular phone data service, and a Web-based video conference service.
- Technology as easy to use. Visual cues provided by the technology to enhance communication, engagement, and satisfaction.

Parkinsons-RCT

• 7-month, 2-center, randomized controlled clinical trial.
• Patients' homes and outpatient clinics at 2 academic medical centers.
• No statistical difference in quality of life
• Compared with in-person visits, each telemedicine visit saved participants, on average, 100 miles of travel and 3 hours of time.

IBD

• Stable IBD patients
• blood test forms and a simple questionnaire with an information sheet.
• If they meet any of the criteria on the questionnaire, they are asked to contact the IBD specialist nursing team to discuss their situation.
• Follow-up 20% of the Southampton IBD cohort using the VC.
• well-maintained database with good integration of IT systems and requires both clerical and IBD nurse specialist support.
Virtual Ward

- Predictive model to identify individual patients at high risk of future unplanned hospital admission
- Intensive, multidisciplinary, case management at home using the systems, staffing and daily routines of a hospital ward

Virtual Ward


- Three adaptations of the ‘virtual wards’ model from England

- Different versions of the virtual wards intervention had been implemented in each site

- One reverted to one to one case management

- Lessons learnt:
  - safeguard the multidisciplinary nature of the intervention
  - ensure the active involvement of GPs
  - Establish feedback processes to monitor performance such as the number of professions represented at each team meeting.
Virtual Ward- RCT

• High-risk adult hospital discharge patients in Toronto
• Randomly assigned - virtual ward or usual care.
• 1923 patients: 960 to the usual care group and 963 to the virtual ward group.
• The first patient was enrolled on June 29, 2010, and follow-up was completed on June 2, 2014.

Dhalla et al

- No statistically significant effect of a virtual ward model of care on readmissions or death at either 30 days or 90 days, 6 months, or 1 year after hospital discharge.
Possible reasons

- Difficult for virtual ward to communicate with many patients’ primary care physicians.
- Fragmented care—many different providers
- Different IT systems
- Intervention we tested began after discharge and not during the acute care hospitalization.
Summary

- Clarify Goals
- Prioritise Objectives
- Establish Policies and Procedures
- Operational Issues
- Integrating IT systems
- Personnel

*It is not the strongest of the species that survives, nor the most intelligent, but the one most responsive to change*
"Your x-ray showed a broken rib, but we fixed it with Photoshop."