Telehealth – next steps?

Peter Kelly

DPH

Stockton

- Telemedicine is aimed at supporting people with long term conditions to monitor and manage their own care in their own home environment

Pressures

- An aging population
- An aging population with many people living in isolation
- An aging population living longer with long term conditions
- An aging population with increasing dependency upon health and social care services
- An aging population with increasing expectancy of, and demand upon, health and social care services who have reducing resources

Kings Fund review of 430 studies from 1988 to 2011

- Diabetes
- Heart Failure
- Stroke
- COPD
- Depression
- Older people
- Multiple long term conditions
- Hypertension

Mixed results

- A positive impact in:

- 15/20 studies for heart failure
- 11/18 studies for diabetes

- But

- Only 7 studies with inconclusive results for patients with multiple long term conditions

DH Whole System Demonstrator Programme (2008-2011)

- 3230 patients in telemedicine trial
- 12 months data suggested 15% reduction in A&E attendances, 20% reduction in emergency admissions, 14% reduction in bed days and 8% reduction in tariff costs
- BMJ 2012 review concurred with clinical findings but found less evidence of cost reduction and this was re-iterated clearly in the BMJ 2013

King's Fund conclusion

- Successful deployment of telemedicine is far more than a question of technology, and requires a new approach to care that implies the need for service redesign, strong collaboration across health and social care, reshaping of professional roles and staff training and support for patients in the use of technology

It seems to work really well in Kaiser Permanente and VHA schemes in the USA

- Extensive telemedicine services for older people

- 20% reduction in hospital admission
- 25% reduction in bed days

Table 1: *Scale and costs for key disease groups across NHS and potential impact from introducing telehealth*

Condition	Approximate Prevalence	Approximate annual direct cost in England	Potential utilisation decrease from telehealth based on VHA experience
Diabetes	2.2 million[a]	£9 billion[f]	20.4%[k]
Hypertension	10 million[b]	£7 billion[g]	30.3%[k]
Congestive heart failure (CHF)	0.75 million[c]	£625 million[h]	25.9%[k]
Chronic Obstructive Pulmonary Disease (COPD)	0.9 million[d]	£492 million[i]	20.7%[k]
Depression	12.75 million[e]	£37 million[j]	56.4%[k]

5 overall learning points form VHA

- As part of an overall redesign of care, telehealth represents a vital element in the shift towards more community home based care

- Requires considerable senior leadership, considerable investment and time, substantial change to organisational infrastructure and performance management

- In addition to benefitting carefully targeted patients, telehealth can be applied to broader health and well-being programmes.

- An integrated patient record greatly facilitates collaboration between clinicians with telehealth data available to community wide electronic health records

- Training is vital supported by robust clinical audit

In summary

- Considering the health and social care needs of people with long term conditions in anything other than a wholly integrated way will undermine the potential and effectiveness of telemedicine (and telecare).