Designing health systems to respond to the challenges of person-centred care

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Series of major changes and challenges

In patterns of the population and disease

In policy direction in many countries

Within medicine itself

In the workforce

And in the wider policy environment

Aging

Globally between 2015 and 2030, the number of people in the world aged 60 years or over is projected to grow by 56 per cent

The number of people aged 80 years or over is growing even faster than the number of older persons overall.

60+ growth

Fastest in Latin America and the Caribbean (71%)

Asia - 66 per cent

Africa - 64 per cent

Oceania - 47 per cent

Northern America - 41 per cent

Europe - 23 per cent

Multimorbidity – it's not just aging

UK: Between 2015 and 2035 the proportion of people with 4+ diseases will almost double

2015: 9.8%

2035: 17.0%

Two-thirds of those with 4+ diseases will have mental ill-health (dementia, depression, cognitive impairment.

Multi-morbidity prevalence in new cohorts aged 65–74 years will rise

2015: 45.7%

2035: 52.8%

Victims of success

Improvement in hospital survival rates that occurred between 2000 and 2009 explains 37.3 percent of the total increment in unplanned admissions

One extra patient surviving increases the expected number of subsequent admissions occurring within 1 year from discharge by 1.9 admissions for every 100 index admissions

Similar results in hip fracture

Medical staffing model not matching patient need

One in three patients admitted to hospital in England as an emergency in 2015/16 had five or more health conditions

This is up from one in ten in 2006/07.

Growth in multimorbidity means hospitals often have the wrong types of staff to deal with the patients they are seeing

Too many narrow specialists – not enough general physicians and geriatricians

Response has been the huge growth in hospitalists in the USA

Other changes in healthcare

Workforce challenges and changes

- Shortages
- Burnout
- Rurality

Technology changes in how patients want to use the system

- digital, phone and web

Significant changes in diagnostic technology and its use

- Imaging
- Pathology

Specialisation & regionalisation

Hospital are finding it difficult to maintain the full range of specialisms

Strong evidence for quality from higher volumes in some based areas

- Learning effects
- Development of critical mass of intensive care support
- Ability to have a senior doctor on site

A problem with along tail of low volume procedures

Scale is not so important in general medical specialties but a critical mass of staff is needed

Many very small hospitals cannot provide this

Growth in interest in integrated, person centred healthcare

Effectiveness argument - fragmented care produces poor results for patients

Economic argument – avoidable hospital stays and avoidable morbidity waste money

Recognition of the importance of social factors - care can be improved by addressing social determinants

Personalisation - following single disease pathways often doesn't work and may not achieve the patient's goals

Scale up primary care

Scaling up practices

Creating networks and larger groups

Standardization of care pathways

Build an extended team

Pharmacists

Allied health

Mental health

Care navigators

Social prescribing

Home care nursing

Specialist nurses for disease management

Enable with technology

Increased availability of diagnostics and treatments in primary care settings

Shift from face to face to phone and web

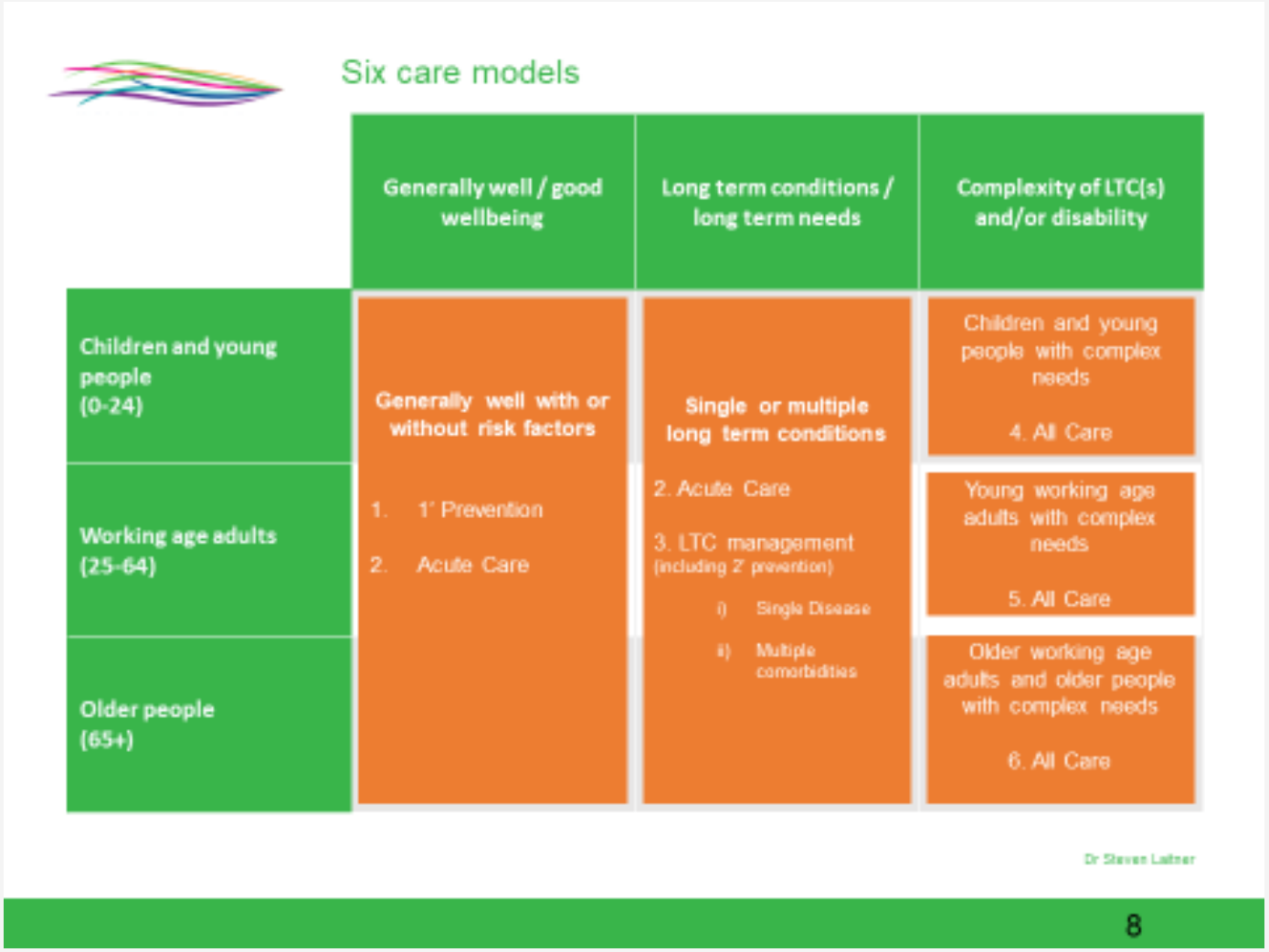
Shared records across the system and with hospitals

Population registries deploying methods for segmenting and risk stratification

21/06/2019	Generally well		Long term conditions / Long term needs		Complexity of LTC(s) and/or disability	
	Low risk	High risk	Low risk	High risk	Low risk	High risk
Children and Young People						
Working Age Adults						
Older People						

This framework was developed by Dr Steve Laitner and Dr Mark Davies, NAPC

Design care models for Segments



Change the hospital's relationship with primary care

New roles for specialists

- Co-producer of pathways and guidelines with patients and primary care
- Provider of advice and guidance – replacing referral for many patients
- Dealing with the most complex and difficult patients
- Educator and advisor - Keeping the system up to date with the science
- Support to specialist nurses and care coordinators
- Active follow up of discharged patients
- Taking a population health view
  - Developing and running registries with primary care
  - Identifying the highest risk patients
  - Developing population health interventions and understanding the local social environment

Hospitals and multi-morbidity & frailty

Increased need for general physicians

More responsive specialists

For frailty:

- Hospital specialists and teams to specialize in assessment and care
- Comprehensive geriatric assessment methods
- Support to other specialists
- Advanced planning for end of life care
- Improved mental health support to hospitals
- Discharge to assess
- Supporting services outside hospital – especially care homes

Specialisation & regionalisation

Hospital are finding it increasingly difficult to maintain the full range of specialisms

Strong evidence for improvements in quality from higher volumes in procedure based specialties

- Learning effects
- Development of critical mass of intensive care support
- Ability to have a senior doctor on site

Scale is not so important in medical specialties

This and economic drivers creating pressures to regionalise

Hub and spoke

Division of labour between hub and spokes – e.g. Colorectal Cancer

Hub

Major surgery, radiotherapy, histopathology, and manage complex, metastatic disease, research, leading standards development

Spokes

Screening, scoping, imaging, biopsy, surveillance, chemotherapy, rehabilitation and co- ordinating end of life care

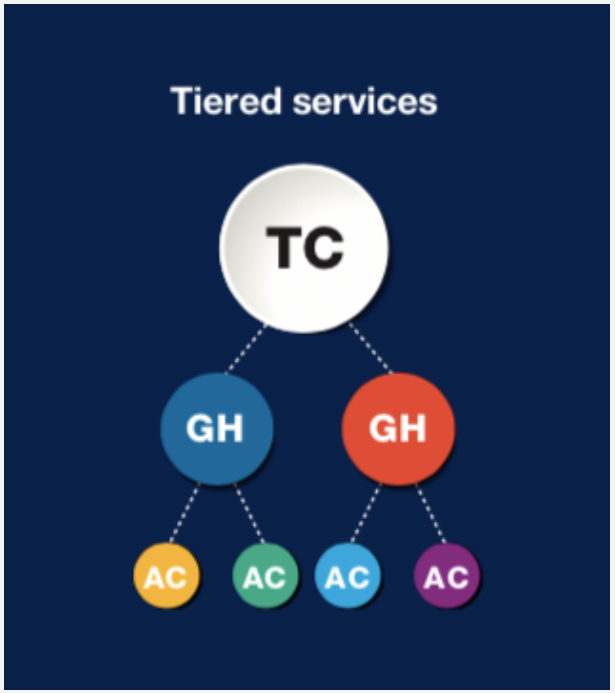
TC = Tertiary Centre
GH = General Hospital
AC = Ambulatory care

Tiered networks

For example:

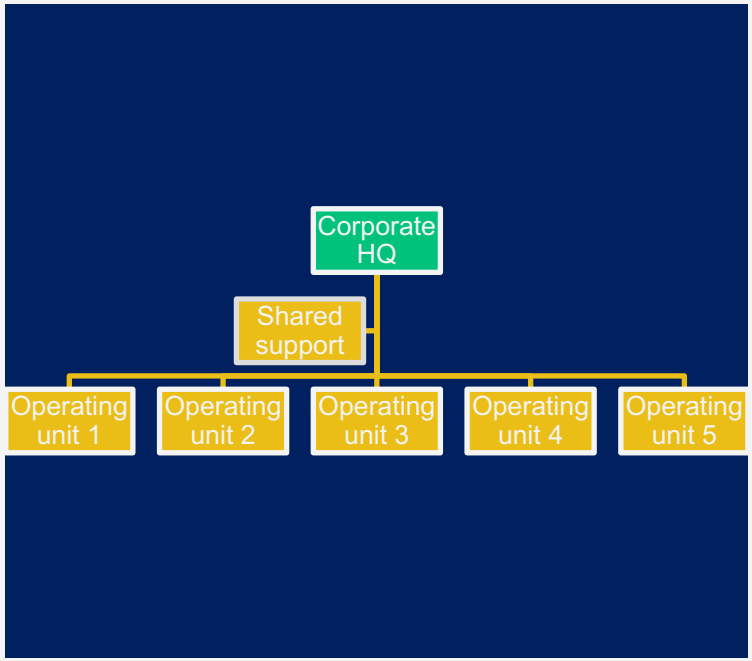
Obstetrics with tiers described by clinical risk & need

Trauma networks



Hospital groups

- Shared back office functions, QI, policy development & usually purchasing
- Operating units have a high level of autonomy on business choices
- Different management skills needed at the centre than in operating units
- Growing rapidly in some places



Non-hierarchial networks

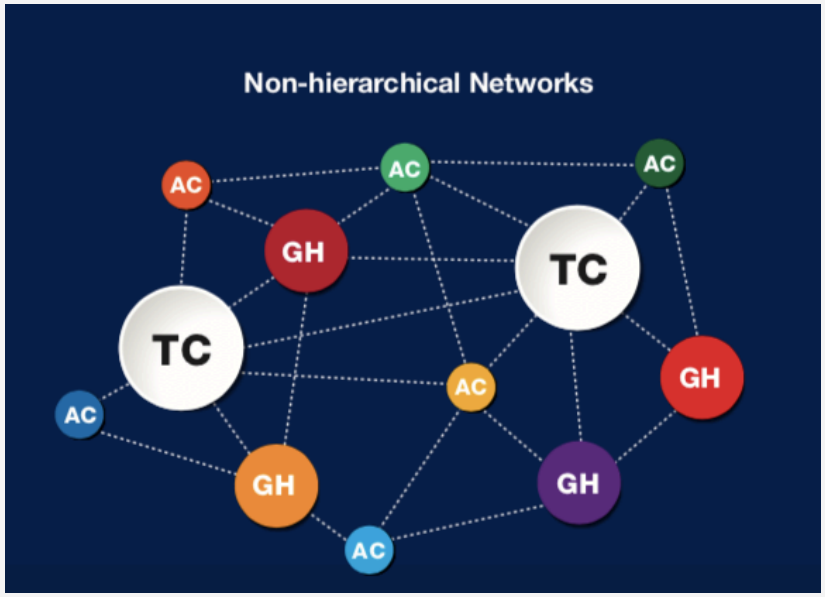
Rather rare at present

E.g. ParkinsonNet in the Netherlands

Shared pathways

Accredited providers with defined roles

Patients chose their route through the system



Transfers and support

Networks that function well with control centres that organise transfers and the provision of advice

Using technology to provide remote support

The answer is always ‘yes’ - ‘Send and call’

Retrieval and transfer services - Up-skilling of paramedics and nurses to support these

Standardisation of approaches across networks are required

Other changes

Hospital services reach out and boundaries blur

- Rapid discharge and step down
- End of life care
- Support for or even ownership of care homes
- Home care and rehabilitation
- Support for remote monitoring

Changes in the organisation of planned care and especially surgery

- Stand alone units
- ‘Factory models’

Managing change

Evolution or design?

The role of master planning

The hospital is not a stand alone organization & is not the focus for planning services

The key question is what is the best way of meeting the needs of our patients and the wider population

The use of design principles rather than detailed model prescription provides some of the answer

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