SCOTLAND
I’VE JUST INVENTED A MACHINE THAT DOES THE WORK OF TWO MEN.

UNFORTUNATELY,

IT TAKES THREE MEN TO WORK IT

SPIKE MILLIGAN
The epidemiology of multimorbidity in a large cross-sectional dataset: implications for health care, research and medical education

Karen Barnett, Stewart Mercer, Michael Norbury, Graham Watt
Sally Wyke, Bruce Guthrie

LANCET 12th May 2012
The majority of over-65s have 2 or more conditions, and the majority of over-75s have 3 or more conditions.

More people have 2 or more conditions than only have 1.

Multimorbidity is common in Scotland.
SOCIAL PATTERNING OF MULTIMORBIDITY

Percentage of patients with 2 or more conditions

Age Group (years)


Deciles of deprivation

10 Deprived
9
8
7
6
5
4
3
2
1 Affluent
PATIENTS WITH SINGLE CONDITIONS ARE A MINORITY

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percentage of patients with each condition who have other conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart failure</td>
<td>0% 20% 40% 60% 80% 100%</td>
</tr>
<tr>
<td>Stroke/TIA</td>
<td>0% 20% 40% 60% 80% 100%</td>
</tr>
<tr>
<td>Atrial fibrillation</td>
<td>0% 20% 40% 60% 80% 100%</td>
</tr>
<tr>
<td>Coronary heart disease</td>
<td>0% 20% 40% 60% 80% 100%</td>
</tr>
<tr>
<td>Painful condition</td>
<td>0% 20% 40% 60% 80% 100%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>0% 20% 40% 60% 80% 100%</td>
</tr>
<tr>
<td>COPD</td>
<td>0% 20% 40% 60% 80% 100%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>0% 20% 40% 60% 80% 100%</td>
</tr>
<tr>
<td>Cancer</td>
<td>0% 20% 40% 60% 80% 100%</td>
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<tr>
<td>Epilepsy</td>
<td>0% 20% 40% 60% 80% 100%</td>
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<tr>
<td>Asthma</td>
<td>0% 20% 40% 60% 80% 100%</td>
</tr>
<tr>
<td>Dementia</td>
<td>0% 20% 40% 60% 80% 100%</td>
</tr>
<tr>
<td>Anxiety</td>
<td>0% 20% 40% 60% 80% 100%</td>
</tr>
<tr>
<td>Schizophrenia/bipolar</td>
<td>0% 20% 40% 60% 80% 100%</td>
</tr>
<tr>
<td>Depression</td>
<td>0% 20% 40% 60% 80% 100%</td>
</tr>
</tbody>
</table>

**This condition only**
**This condition + 1 other**
**+ 2 others**
**+ 3 or more others**

This condition only
This condition + 1 other
+ 2 others
+ 3 or more others

PATIENTS WITH SINGLE CONDITIONS ARE A MINORITY
MOST PEOPLE WITH ANY LONG TERM CONDITION HAVE MULTIPLE CONDITIONS IN SCOTLAND
RANDOMISED CONTROLLED TRIALS

A SYSTEMATIC SOURCE OF BIAS
Patients and caregivers are often put under enormous demands by health care systems

Frances Mair, Carl May
Thinking about the burden of treatment
BMJ 2014;349:g6680 doi: 10.1136/bmj.g6680 (10th November 2014)
HEALTH CARE AS A PINBALL MACHINE
### Exhibit ES-1. Overall Ranking

<table>
<thead>
<tr>
<th>Country Rankings</th>
<th>AUS</th>
<th>CAN</th>
<th>FRA</th>
<th>GER</th>
<th>NETH</th>
<th>NZ</th>
<th>NOR</th>
<th>SWE</th>
<th>SWIZ</th>
<th>UK</th>
<th>US</th>
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<tr>
<td>Overall Ranking (2013)</td>
<td>4</td>
<td>10</td>
<td>9</td>
<td>5</td>
<td>5</td>
<td>7</td>
<td>7</td>
<td>3</td>
<td>2</td>
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<td>Quality Care</td>
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<tr>
<td>Effective Care</td>
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<td>5</td>
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<td>6</td>
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<tr>
<td>Patient-Centered Care</td>
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<td>10</td>
<td>7</td>
<td>3</td>
<td>6</td>
<td>11</td>
<td>9</td>
<td>2</td>
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<td>Access</td>
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<td>4</td>
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<td>6</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>9</td>
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<tr>
<td>Cost-Related Problem</td>
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<td>5</td>
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<td>4</td>
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<tr>
<td>Timeliness of Care</td>
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<td>10</td>
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<td>8</td>
<td>9</td>
<td>1</td>
<td>3</td>
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<tr>
<td>Efficiency</td>
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<td>10</td>
<td>8</td>
<td>9</td>
<td>7</td>
<td>3</td>
<td>4</td>
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<td>Equity</td>
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<td>2</td>
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<td>11</td>
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<tr>
<td>Healthy Lives</td>
<td>4</td>
<td>8</td>
<td>1</td>
<td>7</td>
<td>5</td>
<td>9</td>
<td>6</td>
<td>2</td>
<td>3</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Health Expenditures/Per Capita, 2011**</td>
<td>$3,800</td>
<td>$4,522</td>
<td>$4,118</td>
<td>$4,495</td>
<td>$5,099</td>
<td>$3,182</td>
<td>$5,669</td>
<td>$3,925</td>
<td>$5,643</td>
<td>$3,405</td>
<td>$8,508</td>
</tr>
</tbody>
</table>

Notes: * Includes tax. ** Expenditures shown in $US PPP (purchasing power parity); Australian $ data are from 2010.

GATEKEEPING
Applying the CARE measure and Patient Enablement Instrument (PEI) after general practice consultations

YOU CAN GET EMPATHY WITHOUT ENABLEMENT

BUT YOU NEVER GET ENABLEMENT WITHOUT EMPATHY

Mercer SW Jani BD Maxwell M Wong SYS Watt GCM
Patient enablement requires physician empathy:
a cross-sectional study of general practice consultations
in areas of high and low socio-economic deprivation in Scotland
BMC Family Practice 2012, 13:6
WHO NEEDS INTEGRATED CARE?

POTENTIALLY ANYONE BUT MOSTLY

THE 15% OF PATIENTS

WHO ACCOUNT FOR 50% OF NHS WORKLOAD
A MINORITY OF PATIENTS GENERATE LOTS OF ACTIVITY

10% of patients with 4 or more conditions accounted for

34% of patients with unplanned admissions to hospital and

47% of patients with potentially preventable unplanned admissions.

Payne R, Abel G, Guthrie B, Mercer SW.
The impact of physical multimorbidity, mental health conditions and socioeconomic deprivation on unplanned admissions to hospital: a retrospective cohort study.

SCHEHEREZADE

TELLING 1001 TALES
HOW COULD THEY TELL?

Dorothy Parker
BRINGING IT ALL TOGETHER- ARLENE

- 68 yr old wife, mother, grandmother X3
- About 5 yrs ago, started feeling unwell
- Saw several docs, “borderline diabetes”, BP “a little high”; prescribed meds, told to “exercise & lose weight”
- Couldn’t make follow up appts, fill rx’s
- Continued poor control over 5 yrs
- Admitted to ED with acute MI…

…story totally unlikely, or all too familiar?
Listen to the patient
He is telling you the diagnosis

Listen to the patient
She is telling you her treatment goals

SIR WILLIAM OSLER

PROFESSOR JAN DE MAESENEER
MEASURING OMISSION

THE RULE OF HALVES

50% were diagnosed
50% were treated
50% were controlled

i.e. 12% get best care

THE IMPORTANCE OF GOOD INFORMATION
A COUNTRY DOCTOR
QUESTION
WHY DO YOU ROB BANKS?

ANSWER
BECAUSE THAT'S WHERE THE MONEY IS

WILLIE SUTTON
INTRINSIC FEATURES OF GENERAL PRACTICE

Contact
Coverage
Continuity
Coordination
Flexibility
Relationships
Trust
INVENTING THE WHEEL

INTEGRATED CARE DEPENDS ON MULTIPLE RELATIONSHIPS

HUB
Contact
Coverage
Continuity
Comprehensive
Coordinated
Flexibility
Relationships
Trust
Leadership

SPOKES + RIMS
Keep Well
Child Health
Elderly
Mental Health
Addictions
Community Care
Secondary Care
Voluntary sector
Local Communities
PRIMARY CARE AS A WAGON TRAIN
Health practitioners need to ask not only “What do I do?” but also “What am I part of?”

Don Berwick
Head of US Medicare and Medicaid
BUILDING SOCIAL CAPITAL
COVERAGE
QOF

50-60 clinical targets
Requiring high population coverage
Doctors warn austerity is damaging patients’ health

GPs in deprived areas see sharp rise in social issues

STEPHEN NAYSIMTH
SOCIETY EDITOR

GPs working in the most deprived communities in Scotland have warned of increasing levels of mental and physical health problems among patients affected by austerity.

The Deep End group of GPs, representing 360 doctors in 190 practices, said job losses, welfare reform and cuts to social services were all affecting the health of their patients.

The 190 Deep End group of general practices that serve the most socio-economically deprived areas of the country was set up in 2009. It is backed financially by the Scottish Government.

In a new report, the group says austerity measures are causing increased distress and poverty among their patients, and an increased workload for family doctors.

The GPs add that the growing impact of benefit cuts means much of their time is taken up with social issues rather than patients’ underlying health problems.

In February, the group surveyed members to ask about their experiences of austerity. Doctors responded that patients were suffering deteriorating mental health, and also physical problems.

The report says: “GPs report less time to deal with physical problems, as these are no longer a priority for the patient.”

Benefit changes were also a concern for many GPs, because they felt patients were wrongly being declared fit to work in medical tests on behalf of the University, helped compile the report. He said: “These GPs are absolutely on the front line. Many of them are frustrated that they can see all this happening but people don’t know about it.”

Aberdeen South MP Anne Begg chairs the work and pensions select committee at Westminster and has written to

So many people who are clearly unfit for work are being assessed as capable of work after a cursory assessment

ON THE FRONTLINE: GPs Margaret Craig, left, and Petra Sambale are part of the Deep End group of GP practices. Picture: Colin Mearns

Cases of concern

Patients and doctors in the report are unanimous to protect confidentiality.

A doctor saw a 40-year-old woman who had been sexually abused as a child and had struggled with alcoholism.

“She was found to be capable of work, which was absolutely shocking,” he said.

Patients and doctors in the report are unanimous to protect confidentiality.

Another report seeing a former labourer in his early fifties who was out of work due to osteoarthritis. His disability allowance had been cut and he was unable to afford his mortgage.

“This patient’s mental health problems have escalated and he is being seen psychologically cope with retraining.”

A third case reads simply: “Eastern European pregnant lady with no money or food. Living in squalor with approximately eight other adults. No money available or

Large city hospitals ‘are hubs for MRSA’

HOSPITALS in large cities act as “breeding grounds” for the superbug MRSA, which then spreads to smaller regional hospitals and health centres, according to a new study.

Researchers from Edinburgh University found evidence that shows for the first time how the superbug spreads between different hospitals throughout the country.

The study involved looking at the genetic make-up of more than 80 variants of a major clone of MRSA found in hospitals.

Scientists were able to determine the entire genetic code of MRSA bacteria taken from infected patients.

They then identified mutations in the bug that led to the emergence of new MRSA variants and traced their spread around the country.

Dr Ross Fitzgerald, of The Roslin Institute at Edinburgh University, who led the study, said: “We found that variants of MRSA circulating in regional hospitals probably originated in large city hospitals.”

The high levels of patient traffic in large hospitals mean they act as a hub for transmission between patients, who may then be transferred or treated in regional hospitals.

E.ON to freeze its prices

ENERGY giant E.ON announced it would freeze prices for four million customers after it pledged to keep residential energy
% DIFFERENCES FROM LEAST DEPRIVED DECILE FOR MORTALITY, COMORBIDITY, CONSULTATIONS AND FUNDING

THE INVERSE CARE LAW IN SCOTLAND
CONSULTATIONS IN DEPRIVED AREAS

Multiple morbidity and social complexity

Shortage of time

Reduced expectations

Lower enablement (especially for mental health problems)

Health literacy

Practitioner stress

Mercer SM, Watt GCM

The inverse care law: clinical primary care encounters in deprived and affluent areas of Scotland

GENERAL PRACTITIONERS AT THE DEEP END
DEEP END REPORTS

1. First meeting at Erskine
2. Needs, demands and resources
3. Vulnerable families
4. Keep Well and ASSIGN
5. Single-handed practice
6. Patient encounters
7. GP training
8. Social prescribing
9. Learning Journey
10. Care of the elderly
11. Alcohol problems in young adults
12. Caring for vulnerable children and families
14. Reviewing progress in 2010 and plans for 2011
15. Palliative care in the Deep End
16. Austerity Report
17. Detecting cancer early
18. Integrated care
19. Access to specialists
20. What can NHS Scotland do to prevent and reduce health inequalities
21. GP experience of welfare reform in very deprived areas
22. Mental health issues in the Deep End
23. The contribution of general practice to improving the health of vulnerable children and families
24. What are the CPD needs of GPs working in Deep End practices?
25. Strengthening primary care partnership responses to the welfare reforms
26. Generalist and specialist views of mental health issues in very deprived areas

www.gla.ac.uk/deepend
ISSUES ESPECIALLY PREVALENT IN THE DEEP END

- Mental health problems
- Drugs and alcohol
- Material poverty
- Vulnerable children and adults
- Migrants, refugees and asylum seekers
- Fitness to work
- Sexual abuse history
- Homelessness

GENERIC ISSUES

- How to engage, with patients who are difficult to engage
- How to deal with complexity in high volume
- How to apply evidence

DEEP END REPORT 24
SIX ESSENTIAL COMPONENTS

1. Extra TIME for consultations (INVERSE CARE LAW)

2. Best use of serial ENCOUNTERS (PATIENT STORIES)

3. General practices as the NATURAL HUBS of local health systems (LINKING WITH OTHERS)

4. Better CONNECTIONS across the front line (SHARED LEARNING)

5. Better SUPPORT for the front line (INFRASTRUCTURE)

6. LEADERSHIP at different levels (AT EVERY LEVEL)
THE CARE PLUS STUDY

An exploratory cluster RCT
of a primary care-based complex intervention
for multimorbid patients living in deprived areas of Scotland

152 complex patients randomised in 8 practices
About 60 minutes extra consultation time in a year
90% follow up at 6 and 12 months
Better quality of life
Finding 1:
High levels of recruitment and retention attained to date

Practice recruitment
Invite: 95; Reply: 26 (27%); Agree: 12 (46%)

Patient recruitment and baseline
Invite: 225; Agree and baseline data: 152 (68%)

Randomisation 4 + 4
CARE Plus = 76
Usual Care = 76

Follow-up
6 month = 91%
12 month = 88%

6 month = 89%
12 month = 88%
BY POWERFUL PEOPLE?

BY CLEVER PEOPLE?

LEADERSHIP
FOR INTEGRATED CARE

BY STEETWISE PEOPLE?

BY THE PEOPLE?
SPOCK to KIRK: “It’s not logical, captain”
FIXING IT FOR PATIENTS WHO ARE FLOUNDERING BETWEEN DYSFUNCTIONAL, FRAGMENTED SERVICES
BUILDING PRODUCTIVE LOCAL SYSTEMS

CREATING A SOCIAL REVOLUTION IN HEALTH CARE
A NEW BUILDING PROGRAMME FOR INTEGRATED CARE

PATIENT STORIES

LOCAL HEALTH SYSTEMS

MACHINES THAT DO THE WORK OF TWO MEN