FROM A CONCEPTUAL MODEL TO A SELF-ASSESSMENT TOOL

Prof Stuart Anderson & Dr Cristina-Adriana Alexandru, University of Edinburgh
Summary

► Integrated care
► Complexity of Health and Care Services
► The conceptual tool
► Digitalisation
► Different Views
► Ownership
► Consensus
► Revision
► Maturity Requirements
► Process
► Conclusion
How do Complex Organisations Adopt Integrated Care?
Provide a Framework for Analysis
Digitalize the Model and we’re done?
Nobody has a full view – everyone has their own…
... and they don’t want to share it with everyone...

This is my assessment and I want to keep it confidential right now.
Combining Views

This is our consensus taken from many perspectives
This is my initial assessment of the my health system to adopt integrated care.

In January 2017 significant changes led to changes in maturity, now.

In October 2017 my health systems maturity had developed to now.

This is my health system maturity to adopt integrated care October 2018.
Maturity and maturity requirements...
Developing Processes

➢ Standard processes to support:
  • Reaching consensus
  • Evaluating maturity requirements
  • Matching maturity requirements to health system

➢ Twinning and coaching:
  • Comparing health system maturity
  • Exploring good practice maturity requirements
  • Using the dimensions of the model to focus discussion
Subsystem assessments
Summary

➢ The core conceptual model is agreed, clear and simple.

➢ Tools need to retain this as much as possible.

➢ But… to be used they need to take into account the sorts of processes people follow/

➢ And… the tool needs to have ways of working with the conceptual model in a distributed, multi-lingual environment supporting varied ways of using the conceptual tool.
ASSESSING THE MATURITY OF HEALTHCARE SYSTEMS USING THE SCIROCCO TOOL

Facilitated Discussion
HOW TO USE THE SCIROCCO TOOL TO ASSESS MATURITY OF HEALTHCARE SYSTEMS

Dr Cristina-Adriana Alexandru, University of Edinburgh
Assessing the Maturity of a Healthcare System

The self-assessment process consists of the following steps:

1. Local organisers **identify local experts** to be involved in the assessment

2. The experts **individually perform the assessment** by filling in a questionnaire on the Scirocco tool

3. The experts **share their individual assessments** with the organisers

4. A **workshop** is organised to **discuss and reach a consensus** amongst the different experts about the maturity of the healthcare system
Step 1: A Multidisciplinary Team

- Doctor
- Nurse
- Information Technology (IT) Specialist
- Administrator
Step 2: Performing an Individual Assessment

Maturity Assessment

The objective of this page is to assess the maturity of healthcare systems with regards to integrated care.

Questions marked with * are compulsory

4. Standardisation & Simplification

- 0: No standards in place or planned that support integrated care services
- 1: Discussion of the necessity of ICT to support integrated care and of any standards associated with that ICT is initiated
- 2: An ICT infrastructure to support integrated care has been agreed together with a recommended set of technical standards – there may still be local variations or some systems in place that are not yet standardised
- 3: A recommended set of agreed technical standards at regional/national level, some shared procurements of new systems at regional/national level, some large-scale consolidations of ICT underway
- 4: A unified set of agreed standards to be used for system implementations specified in procurement documents; any shared procurements of new systems; consolidated data centres and shared services widely deployed
- 5: A unified and mandated set of agreed standards to be used for system implementations fully incorporated into procurement processes; clear strategy for technical specification of new systems in regional/national procurement of new systems; consolidated data centres and shared services (including the cloud) is normal practice

If someone asked you to justify your rating here what would you say (please provide a few short sentences):

*
Step 2: Performing an Individual Assessment
Step 3: Sharing Individual Assessments

Scirocco Self-Assessment Tool for Integrated Care

Share Assessment

This page allows you to make your assessment visible to somebody else who has an account, by providing his/her email address in the text field below. Once this email address gets populated in the table, you can also make that person the sole editor of the assessment by making him/her an owner. If you have originally created the assessment, you will always be able to edit who is the owner. If not, you will lose this right once you have made somebody else the owner.

**Users who share assessment Doctoreply**

<table>
<thead>
<tr>
<th>USER</th>
<th>ROLE</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="mailto:Cristina.Alexandru@ed.ac.uk">Cristina.Alexandru@ed.ac.uk</a> (you)</td>
<td>Owner, originator</td>
</tr>
</tbody>
</table>

The assessment is not currently shared with other users

Please indicate the email address of ONE (other) user whom you would like to share the assessment with:

[Share]
Step 4: Negotiating and Reaching Consensus

Consensus Maturity Assessment

This page allows you to reach a consensus amongst your team as to the level of maturity of your healthcare system with regard to integrated care, considering the views of the different individual respondents or sub-tasks.

Legend

Questions marked with * are compulsory

Assessment name:
Cons[HealthcareSystem]

Assessment | Description
--- | ---
Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12

1. Readiness to Change

- 0: No acknowledgement of compelling need to change
- 1: Compelling need is recognised, but no clear vision or strategic plan
- 2: Dialogue and consensus-building underway, plan being developed
- 3: Vision or plan embedded in policy, leaders and champions emerging
- 4: Leadership, vision and plan clear to the general public, pressure for change
- 5: Political consensus, public support, visible stakeholder engagement

If someone asked you to justify your rating here what would you say (please provide a few short sentences):

- 0
- 1
- 2
- 3
- 4
- 5

Mark 'Readiness to Change' as your number one priority

Save composite questionnaire
Step 4: Negotiating and Reaching Consensus

We are all using HL7 FHIR

Yes, but getting the devices to interoperate is a nightmare!

This will all be resolved soon, as we are joining an international standards group for devices.
Step 4: Negotiating and Reaching Consensus
Step 4: Negotiating and Reaching Consensus
Cristina.Alexandru@ed.ac.uk

https://www.scirocco-project.eu/
THANK YOU!
SELF-ASSESSMENT PROCESS IN THE BASQUE COUNTRY

IGOR ZABALA
OSAKIDETZA
Healthcare System in the Basque Country

- Population: 2.17M
- Financed by taxes: 3,605 M€ in 2018
- Universal Healthcare coverage
- Healthcare providers
  - Basque Public Health Service-Osakidetza
    - 13 Integrated Care Organisations
    - 2 Sub-acute Hospitals
    - 3 Mental Health Nets
    - +30,000 Healthcare professionals
Integrated Care in The Basque Country

▸ Integrated Care Organisation (ICO)
  ▸ To achieve less fragmented, more coordinated, more efficient and higher quality care

▸ Integrated care is based on three pillars:
  ▸ Integrative governance
    • Create synergies between different levels of care
  ▸ Population approach
    • Coordination with social and public health actors
  ▸ Culture and values
    • Change from the culture of fragmentation to a culture of integration
Self-assessment - Process

1. Identification of regional/local stakeholders
   10 experts

2. Self-assessment survey
   Meeting to introduce the project and the “Scirocco Tool”

3. Data collection/data analysis
   10 spider diagrams

4. Stakeholder workshops
   Consensus → Final spider diagram of the Basque Country

5. Summary of results and feedback on the process
Local Stakeholders

Multidisciplinary and multi-level group of 10 experts:

- Insurance & Procurement unit’s technician
- Health & social care coordinator
- Economic director of an ICO
- Director of integration of an ICO
- Deputy Director of Quality and Information Department of the General Directorate
- Integration and chronicity service’s technician of the General Directorate
- Internal medicine department manager
- Primary care unit manager
- Primary care nurse
- Hospital nurse
“Stakeholders’ Perspective”

Insurance & procurement unit’s technician

Director of Integration of an ICO

Social and Health care Coordinator
Self - Assessment in The Basque Country “Outcomes”

Areas of strengths

Areas of weaknesses
Key findings

- The spider diagram for the Basque Country is quite homogeneous.
- Not very difficult to agree on discrepancies in stakeholders’ individual scoring.
- The outcomes provide very harmonised approach to integrated care in the region. The outcomes show that there is a progress towards integrated care in all of the dimension.
- There are areas for improvement e.g. citizen participation and empowerment and innovation management that needs to be further promoted.
- It is also necessary to create right environments between the different agents involved in order to improve their collaboration.
- Stakeholders valued the assessment process as very positive.
THANK YOU!
SELF-ASSESSMENT PROCESS IN NORRBOTTEN REGION

LISBETH LÖPARE JOHANSSON
DEVELOPMENT DIRECTOR
NORRBOTTEN REGION
Integrated Care in Norrbotten Region

➢ Chains of care is an integrated care model developed in Sweden with the aim of linking primary, hospital and community care through integrated pathways based on local agreements between providers.

➢ Typical chains of care include screening element in a primary care centre, treatment plans developed in specialist centre and rehabilitation provided in community. Contractual agreements and alignment of incentives that enable efficient use of resources are distinctive features of the Swedish model.
Readiness for Integrated Care - “Stakeholders’ Perspective”
Self-Assessment in Norrbotten– “Outcomes”

No common/systematic approach. Fragmented evaluations when services are implemented.

We do not have much formalized in the Innovation management process. No functions which can work in all parts of the process. Procurement is very much far removed from the process today.

Robust ICT infrastructure Regional Digital first policy Electronic health record implemented since 1994 Various telemedicine services deployed and implemented across the region.

No specific model used for projects or scaling up where you can find support to overcome known inhibitors. Different models have been used with different results.

We do have a somewhat fully integrated health and social care service with collaboration on all three levels but there are still parts that can be improved.

Everyone has access to their own EHR, lab-results, open comparisons, quality registers, specific national registers. Personcentered approach, strategy and action plan for citizen involvement.
THANK YOU!
SELF-ASSESSMENT PROCESS IN OLOMOUC REGION

PETR STRUK & ZDENEK GÜTTER
MINISTRY OF HEALTH & UHO
Integrated Care in Olomouc/Czech Republic

➢ Concept of integrated care

• **National**: IC strategy did not exist until July 2018 and it was not a high level topic; IC has been understood as coordination and interoperability of multiple healthcare providers as well as social care providers; design of primary care reform, shortcomings of current system are recognised and IC strategy is to be developed with the support from Structural Funds in the next 2 years.

• **Regional concept of University Hospital Olomouc (UHO)**: Continuity of care of chronically ill patients in hospital-outpatient-home scope of care, supported by digital healthcare.
Integrated Care in Olomouc/Czech Republic

➢ Organisation of integrated care in the Olomouc/CR

• National:
  - by 2018 - medically driven interworking of actors, esp. in critical branches (e.g. cardiacs – working model designed by 9 societies, cancer – agreements between healthcare providers), typically with no use of ICT for collaboration.
  - Rare IC initiatives of local authorities or social care providers, from the bottom, purpose driven, diverse financial models functioning in parallel to existing ones.

• Olomouc:
  - Czech National eHealth Centre developing models, services and good practices supporting patients at home and using ICT; assuring sustainability of the practices.
Readiness for integrated care in Olomouc Region

➢ The healthcare systems: national, modified Bismarckian insurance based system, healthcare separated from social care system, fragmented healthcare providers of diverse ownership; No sharing of health data, only national eHealth at time of the assessment in late 2017.

➢ Assessment of HC system: 5 stakeholders (nationwide and Olomouc) health and social care managers, strategist, academia.

➢ Results of assessment: Long lasting national conditions for IC were dominantly considered, new UHO activities taken into account. All dimensions’ scores were low (0 or 1). Ongoing initiatives were reflected in scores 1 (e.g. capacity building, innovation approach, removal of inhibitors).
Readiness for Integrated Care - “Stakeholders’ Perspective”

Social care regional manager

Strategist
Self-assessment in Olomouc Region - “Outcomes”
THANK YOU!
Puglia Region

- 4,1 millions population
- 40% Chronic patients
- 21% over 65yrs
Healthcare System in Puglia

► In Puglia, the healthcare system is mainly public. There are also private structures that contributes to the delivery of care cooperating formally with the public system so that citizens can access the service undergoing the same rules of the public services. In the last two years, the system is undergoing a complete reorganisation. At the moment, the service is organised as follow:

► 49 Districts gathered in 6 Local Health Authorities which includes 31 Integrated Health Community centres.
► 5 second level hospitals (average 825 beds) 16 first level hospitals (average 299 beds) 12 basic hospitals (average 127 beds).
► The above listed hospitals includes 2 Hospital Trusts and 2 Research Hospitals.
Readiness for integrated care in Puglia Region

Our assessment process

- Coordinator of the Project shared the methodology with the Scientific Rep, and managing Director

- Circulated a letter of invitation with supporting material

- 11 stakeholders involved divided between Macro-Meso-Micro level of

  - **Macro**: Regional Health Programme Manager, Social Programme Manager, ICT/eHealth **Systems Manager**, Research/investment Funds Manager

  - **Meso**: Health Manager LHA, Health Manger, Industry

  - **Micro**: Specialist, General Practitioner, Citizens Rep, Researcher
Integrated Care in Puglia Region

Some examples of individual assessment:
Regional Programme Manager (left) and Citizen Representative (right)
Integrated Care in Puglia Region

Understanding the concept of integrated care: the assessment outcome

Major strengths include capacity building, structure and governance, finance and funding, whereas citizen empowerment seemed to be a weak point.

Puglia context came out to be coherent with the 2 stars level of maturity stated by the EC when awarding Puglia Reference Site in the EIPonAHA: Governance infrastructure in place, rightly oriented in priorities and funding.
Integrated Care in Puglia Region

From assessment outcomes to our next immediate Integrated Care Model: Care Puglia 3.0
Integrated Care in Puglia Region

From assessment outcomes to our next immediate Integrated Care Model: **Care Puglia 3.0**

- Sharp patient profiling and stratification by age, disease and risk
- Two organisational pillars: primary care clinic and health community district
- Strong engagement of patient through Individual Care Agreement
- Only for GPs on integrated care unit (no GP alone)
- Nursing Care Manager as “Care pivot”
- Keep patient at his own GP as much as possible through basic diagnostics on telemedicine
- Care providing only by pathways shared and updated
- Capitation fee for care service and for tech tools
## Integrated Care in Puglia Region

Our integrated care model: Care Puglia 3.0

<table>
<thead>
<tr>
<th>Diagnostic Routine</th>
<th>DIABETES NOT COMPPLICATED</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MEETING AND CARE AGREEMENT (SHARE&amp;CHECK)</strong></td>
<td>agrees</td>
<td>leads &amp; proposes</td>
</tr>
<tr>
<td><strong>LIFESTYLES &amp; CLINICAL ADHERENCE</strong></td>
<td>self-monitors</td>
<td>leads</td>
</tr>
<tr>
<td><strong>BMI &amp; ABDOMEN CIRCUMFERENCE</strong></td>
<td>self-monitors</td>
<td>leads</td>
</tr>
<tr>
<td><strong>BLOOD PRESSURE</strong></td>
<td>self-monitors</td>
<td>leads</td>
</tr>
<tr>
<td><strong>GLYCADED HEMOGLOBIN</strong></td>
<td>evaluates &amp; decides</td>
<td>executes withdrawal</td>
</tr>
<tr>
<td><strong>CREATININE</strong></td>
<td>evaluates &amp; decides</td>
<td>executes withdrawal</td>
</tr>
<tr>
<td><strong>CALCULATED CLEARANCE</strong></td>
<td>evaluates &amp; decides</td>
<td>executes withdrawal</td>
</tr>
<tr>
<td><strong>GLYCEMIA</strong></td>
<td>evaluates &amp; decides</td>
<td>executes withdrawal</td>
</tr>
<tr>
<td><strong>POSTPRANDIAL GLYCEMIA</strong></td>
<td>self-monitors</td>
<td>evaluates &amp; decides</td>
</tr>
<tr>
<td><strong>FULL URINE EXAM</strong></td>
<td>evaluates &amp; decides</td>
<td>executes withdrawal</td>
</tr>
<tr>
<td><strong>MICROALBUMINURIA</strong></td>
<td>evaluates &amp; decides</td>
<td>executes withdrawal</td>
</tr>
<tr>
<td><strong>LIPID PROFILE</strong></td>
<td>evaluates &amp; decides</td>
<td>executes withdrawal</td>
</tr>
<tr>
<td><strong>FOOT EXAMINATION</strong></td>
<td>self-monitors</td>
<td>leads</td>
</tr>
<tr>
<td><strong>ECG</strong></td>
<td>evaluates &amp; decides</td>
<td>executes test</td>
</tr>
<tr>
<td><strong>OCULAR FUNDUS EXAMINATION</strong></td>
<td>evaluates &amp; decides</td>
<td>executes test</td>
</tr>
</tbody>
</table>
THANK YOU!
SELF-ASSESSMENT PROCESS IN SCOTLAND

DR MARGARET WHORISKEY
HEAD OF TEC AND DIGITAL HEALTHCARE INNOVATION DIVISION, SCOTTISH GOVERNMENT
Health and Social Care Provision in Scotland

14 area Health Boards and 32 Local Authorities

Since April 2016: Integration of health and social care

32 Health and Social Care Partnerships jointly responsible for commissioning and delivery of social care, community health, primary care and some hospital services

Public services wholly funded through taxation – some charging for social care
Readiness for Integrated Care
“Stakeholders’ perspective”
Self-assessment in Scotland – “Outcomes”

Strengths

- Readiness to Change
- Structure & Governance
- Breadth of Ambition
- Evaluation Methods
- Citizen Empowerment
- Population Approach

Weaknesses

- Finance & Funding
- Information & eHealth Services
- Standardisation & Simplification
- Population Approach
Dr Margaret Whoriskey
Head of TEC and Digital Healthcare Innovation Division, Scottish Government

Margaret.Whoriskey@scotland.gsi.gov.uk