

# NHS RightCare scenario: **The variation between sub-optimal and optimal pathways**



**Rob's story: Sepsis**  
Short summary slide pack

June 2018  
Gateway reference: 07876

# Rob and the sub-optimal pathway

- Day 9 - Post operation - cough** Dry cough, mild fever, no real concerns with family as there is a “bug going around”.
- Day 14 – Cough persisting** Family now concerned as Rob has not been eating and feels “fluey”. GP contacted.
- Day 14 – GP tel. consultation** GP suspects viral bronchitis - should resolve itself. Call back if no better or if it gets worse.
- Day 16 – Concern and GP appt** Family are now very concerned as Rob is breathless and vomiting. GP surgery arrange for an afternoon appt. GP is shocked by Rob’s condition and calls for an ambulance. After three hours waiting GP calls 999 for a blue light response.
- Day 16 – Ambulance** Double technician ambulance crew arrive and take Rob to the surgical assessment unit where he is “a bit slow to respond”.
- Day 16 – Ward admission** Not “handed over” to staff and the GP observations are missing.
- Day 16 - Observations** Baseline observations done by HCA. NEWS score calculated and oxygen given. Junior doctor alerted but the registrar is busy. Later the junior doctor administers stat bolus 500ml of glucose 5% over five minutes but the cause is still unclear.
- Day 16 – Serious deterioration** Mental state is deteriorating and the registrar suspects pneumonia. Rob is now breathless, shocked and close to collapse. ICU ventilate, give antibiotics, fluid resuscitation and inotropes over a five day period.
- Day 27 – Discharged home** After a further stay in the General Medical Ward Rob is discharged home.
- Day 29 – GP follow-up** Rob is struggling to walk and needs a stick. His memory is poor and he still has a persistent cough and is still breathless.
- Day 90 – Limited recovery** Rob can now undertake small amounts of activity but needs frequent rest. His sleep is disturbed and his moods are low with disturbing flashbacks on a regular basis. His family are seriously concerned about Rob’s mental health; the whole family are feeling the strain.
- Day 100 – Legal action** The family write a formal letter of complaint to the GP threatening legal action.

# The levels of NEWS2 scores and associated risk

Date	Time		Clinical concern	NEWS
14 days pre admission		Post op discharge	Low	Unknown
2 days pre admission		GP call	Low	Unknown
Admission day 1	1545	GP appointment	High	Unknown
	2015	Ambulance	High	Unknown
	2048	SAU arrival	High	Unknown
	2200	Surgical review	High	Unknown
	2300	Medical review	High	Unknown
	2330	ICU	High	Unknown
Admission day 12		Discharge	Low	Unknown

**Sub-optimal case**

Date	Time		Clinical concern	NEWS2
14 days pre admission		Post op discharge	Low	0
2 days pre admission		First GP appointment	Medium	Not calculated
Admission day 1	0900	Second GP appointment	High	10
	0930	Ambulance	Very High	13
	1000	ED Resus	Extreme	14
	1100	ED Resus	Extreme	12
	1200	ED Resus	Extreme	15
Admission Day 2		HDU	High	10
Admission Day 3		Ward	Medium	3

**Optimal case**

# Rob and the optimal pathway

- Day 9 – Post operation-cough** Dry cough, mild fever, no real concerns with family as there is a “bug going around”.
- Day 14 – Cough persisting** Family now concerned as Rob has not been eating and feels “fluey”. GP contacted as aware of Thromboembolism and sepsis from the hospital discharge information post surgery.
- Day 14 – GP tel. consultation** Receptionist notes ‘sepsis’ language from the family and arranges emergency GP appt. GP records vital stats and provides leaflet – doesn’t justify antibiotics at this stage.
- Day 16 – Concern and GP appt.** Family are now very concerned as Rob is breathless and vomiting. Surgery advises to come in immediately. GP is concerned by Rob’s condition and calls the medical admissions team and ambulance with a NEWS score of 10 and “sepsis suspected”, plus prepares a detailed letter with deterioration information for the ambulance crew.
- Day 16 – Ambulance and A&E** Ambulance crew with paramedic arrive and take Rob to the Emergency Unit . He then receives the sepsis six and has a chest X-ray, plus contact with the ITU outreach team who agree HDU admission is required – antibiotics administered.
- Day 17 – Ward admission** Moved to General Medical Ward after one day in HDU.
- Day 18 - Observations** Rob is now looking well enough for discharge – antibiotics reviewed and changed.
- Day 19 – Serious deterioration** Discharged home with discharge summary (sepsis and pneumonia) and anticipated recovery path.
- Day 20 – GP follow-up** GP explains what recovery will be like and arranges vaccination in the near future – the family are very grateful for the GP’s prompt action.
- Day 90 – Recovery** Pneumonia has completely resolved and Rob has just returned from a family wedding and a three week holiday in Trinidad.
- Day 100 – GP practice reflection** The practice undertakes an SEA review of the case and recognises the value of a sepsis aware practice and the use of physiology and communication to improve patient outcomes.

# Financial information

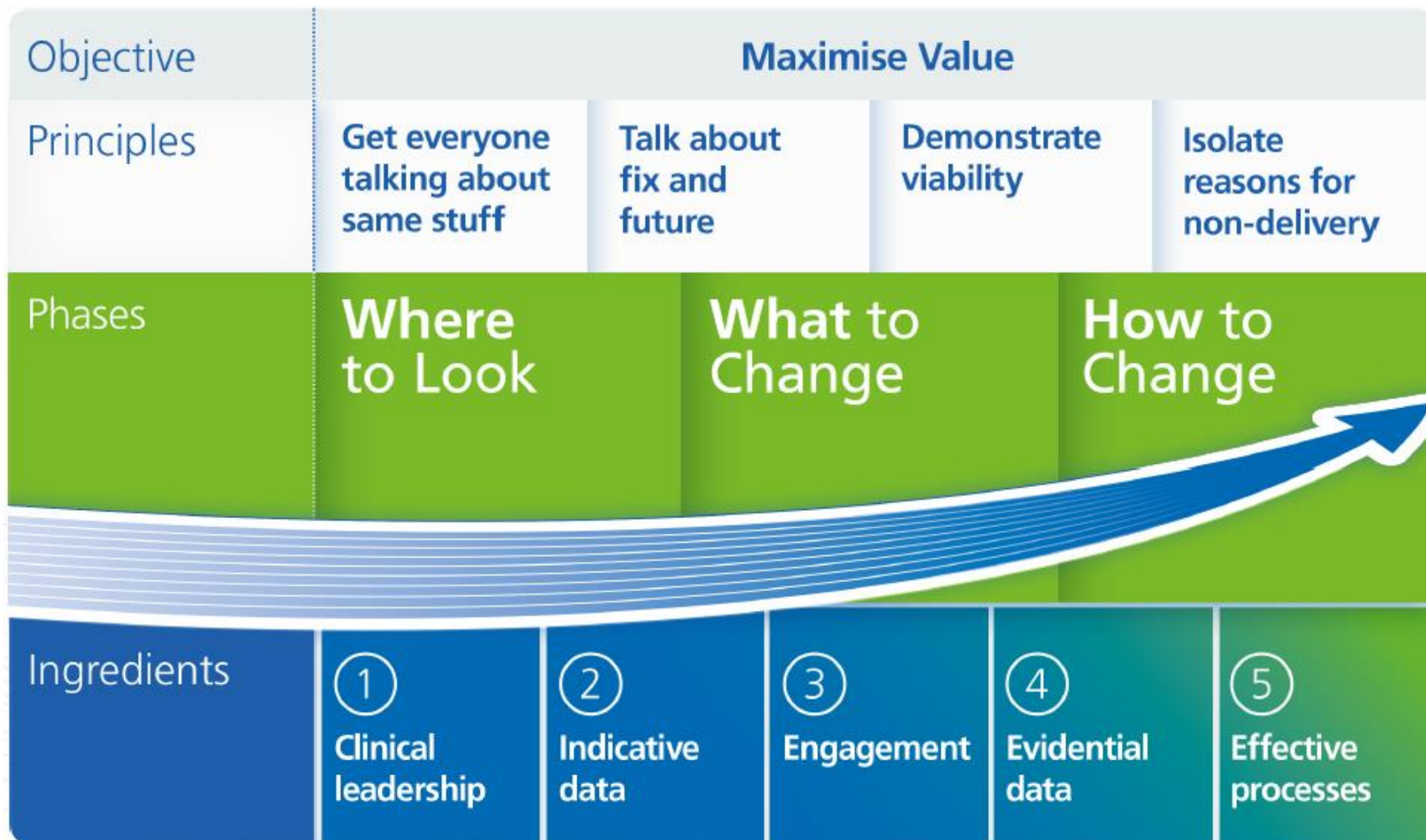
Analysis by Cost Category	Sub-optimal	Optimal	Optimal %
Primary care management	£238	£451	190%
Urgent and Emergency care	£247	£247	100%
Secondary care management	£7,518	£2,318	31%
<b>Grand total</b>	<b>£8,003</b>	<b>£3,016</b>	<b>38%</b>

The key improvement is due to prompt diagnosis and good communication between healthcare professionals which results in prompt administration of antibiotics. This significantly reduces the volume and type of bed days in hospital from 11 days, including five in ICU, in the suboptimal case down to four days, with one in ICU, in the optimal case.

Primary care then invests much more significantly in post sepsis aftercare with practice visits every two weeks for the first three months after hospital discharge. Close monitoring post-sepsis is very important. This shift in focus represents improved value for money, better use of healthcare resources and most importantly a significant improvement in Rob's clinical outcome and quality of life.

**NB: Please refer to the detailed scenario for data and financial analysis details and caveats.**

# The NHS RightCare approach



# Further information

For more information about Rob's journey, NHS RightCare or the sepsis programme you can:

Email:

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Visit:

- [www.england.nhs.uk/rightcare](http://www.england.nhs.uk/rightcare)
- [www.england.nhs.uk/?s=sepsis](http://www.england.nhs.uk/?s=sepsis)

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- [@NHSRightCare](https://twitter.com/NHSRightCare)

Please note: Appendices to support the main scenario document and the PowerPoint summaries can be found at <https://www.england.nhs.uk/rightcare/products/ltc/sepsis-scenario/>