

Hospital at Home!





Scottish Government: 2020 Vision



Florence Nightingale quotes:

“It may seem a strange principle to enunciate as the very first requirement in a hospital that it should do the sick no harm.”

“Keep no patient in hospital a day longer than is absolutely necessary.... the patient may have to recover not only from the illness or injury but from hospital”

Scottish Government Definition of Hospital at Home:

Hospital at home is a service that provides acute hospital level care by healthcare professionals in a home context for a condition that otherwise would require acute hospital inpatient care



What is it not?

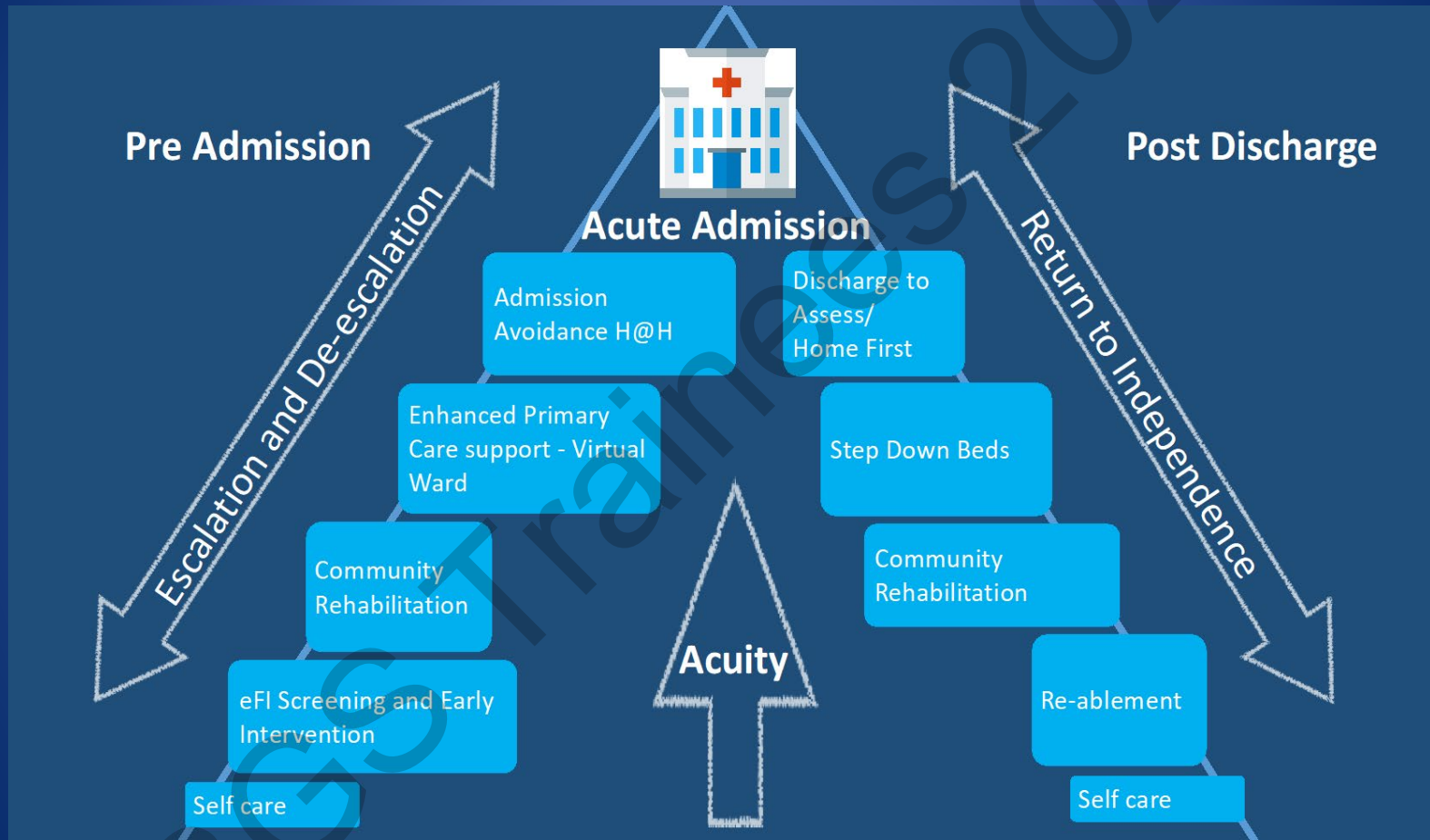
Early supported discharge X

Virtual ward for chronic disease management X

Early Supported Discharge X

Outpatient Antimicrobial Team X

Hospital at Home: part of a bigger system...



What's different from other models?

- Senior medical decision maker
- Urgent access to hospital level diagnostics
- The nature of the interventions
- The acuity of the patient and complexity of the conditions managed
- Short time limited acute episodes of care

What's different from other models (2)?

- Patients are treated as though admitted to hospital but maintained within their own home
- Care is delivered by MDT with current acute standards of care
- It complements other community-based health and care initiatives

The Daily Ward (Fife H@H style)

Daily nurse reviews

Daily 'ward' round

Medical reviews

Medication reviews
-stop/starts

Rapid access to:

- Investigations
- Treatments
- AHP intervention
- Equipment

Further daily visits
Clinical co-ordinator



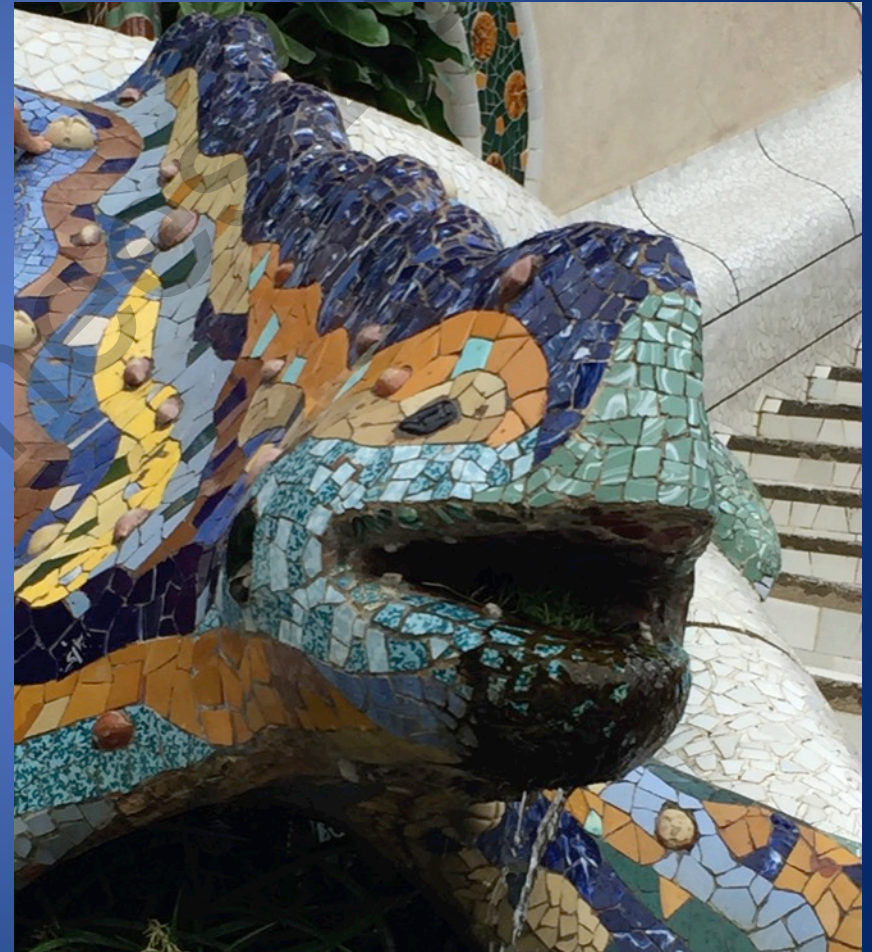
*Providing a similar level of care that would be expected in hospital
If need hospital care they are admitted*

Why do it?

Hospital at home has been in existence in a number of countries across the world for longer than it has been established in the United Kingdom. Evidence points to various drivers for developing a Hospital at Home service for older adults.

Around the world....

- Wales
- Northern Ireland
- New York
- Belgium
- Holland
- Barcelona
- New Zealand
- Chile
- Canada
- Australia....



A note of caution:



“System factors such as increasing pressure on acute care beds may motivate the development of Hospital at Home services, and whilst potentially helpful, these are unlikely to provide the solution to such pressures on their own and should be considered as part of wider system transformation”

Frailty:

Why Focus on frailty?

	All frailty groups	mild	moderate	severe
Unplanned bed days	£1,172m	£396m	£482m	£293m
Community prescribing	£430m	£231m	£137m	£62m
Outpatient appointments	£412m	£240m	£118m	£54m
GP appointments	£394m	£212m	£127m	£55m
Community nursing	£138m	£84m	£44m	£10m

Extrapolated costs over 12 months for people 65 and over with frailty

Risks for frail people in hospital:

- Institutionalisation:
- Delirium
- Reduction in function
- Increased need for social care services



Questions?

- Is it value for money?
- Is there a reduction in mortality?
- Any reduction in dependency at a year?
- What about incidence of delirium?
- Can we avoid PJ paralysis?



The Evidence?

- Statement: “Hospital at Home can be delivered safely without increased rates of death or re-admission to acute care.”
- Cochrane Review:
 - Similar rates of mortality (six trials, n= 912)
 - Similar rates of readmission (seven trials, n= 834)
(when compared with inpatient care)
- A UK RCT(n=118), published subsequently to the Cochrane review, reported similar findings.

Statement: “Hospital at may reduce the likelihood that patients will require to move into residential care in the months after the acute episode.”

Cochrane Review:

- meta-analysis of RCTs (five trials, n=727) found that Hospital at Home reduced the likelihood of patients living in residential care.



Statement: “Patients generally express high levels of satisfaction with the service”

- Cochrane Review:
 - Five trials within the Cochrane review assessed patient satisfaction.
 - Patients receiving Hospital at Home care expressed greater or similar satisfaction with their care.
- In the UK RCT published subsequently to the Cochrane review, 90% of all study participants expressed a preference for Hospital at Home care.



Statement: Costs of Hospital at Home are generally lower than inpatient care, but there can be considerable variation in costs between services. Hospital at Home services have the potential to be a cost-effective option.

- Cochrane Review:
- Three studies included within a Cochrane review examined cost data.
 - In all three, costs were lower for the Hospital at Home patients, but the costs included varied among studies.
 - Lower costs were also reported in a subsequently published UK RCT and a small pilot RCT conducted in the US.
 - A retrospective study examining three sites in Scotland found costs, at six months follow up ranged from 18% lower than admission to hospital to 15% higher.

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Hospital at Home
Guiding principles for
service development

January 2020

Recommended reading!

Scottish Government
publication, produced by

- Living Well in Communities, ihub (Healthcare Improvement Scotland)

Costs: beyond the £££

- Evidence on the impact of Hospital at Home on informal carers is under developed.
- For some families, it's much easier if their relative is at home, for others, the increased burden is problematic.





Who are we?



Admin staff

Physiotherapists
and PT assistant

Nursing

Rapid Response
Carers

Occupational
Therapists

Consultant
Specialty Dr

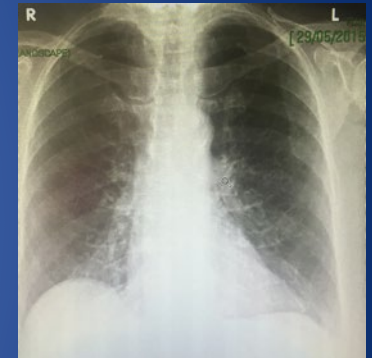
Social Workers
Hospital Inreach

Falls Practitioner

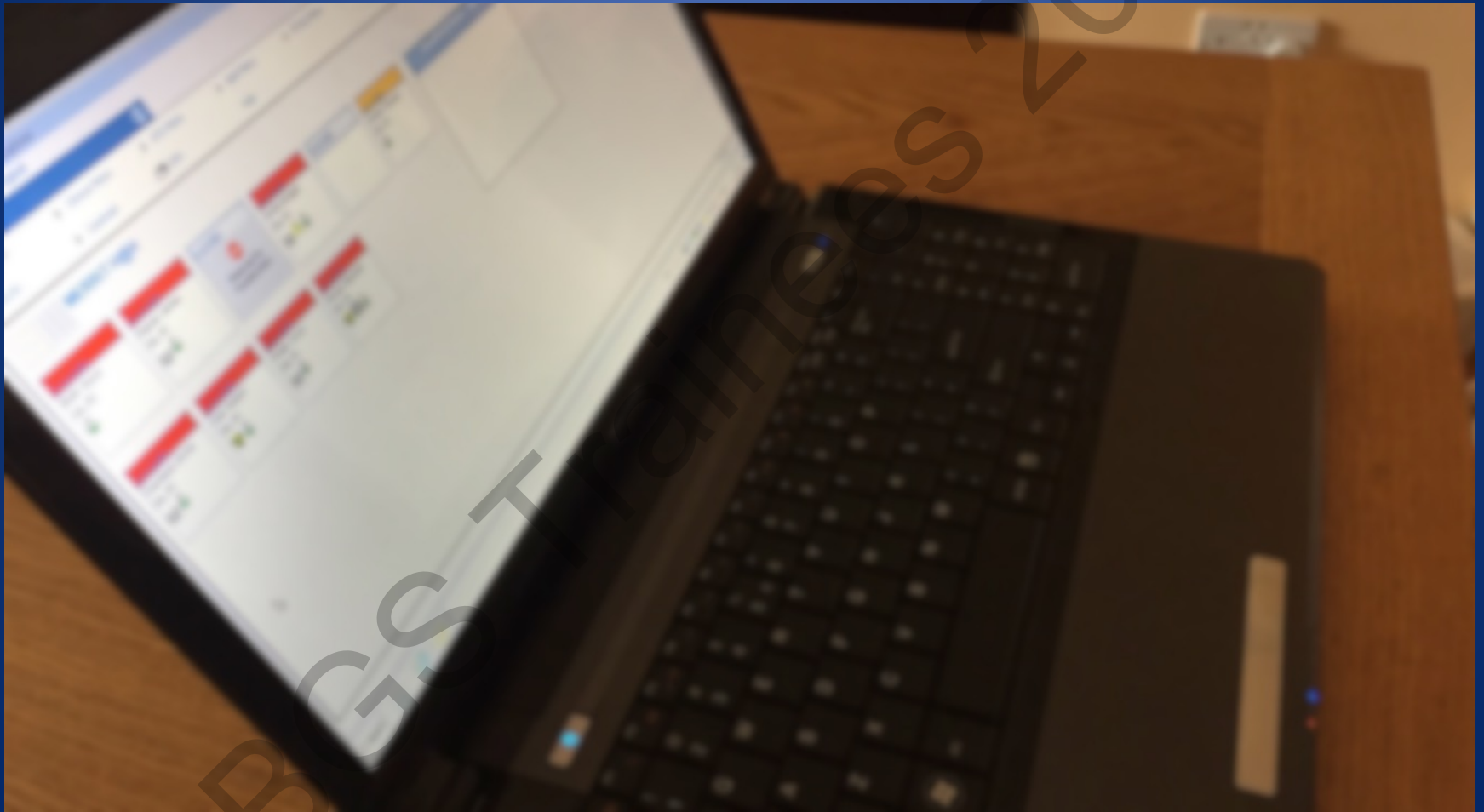
Pharmacist

Council and NHS staff

What do we do?



What our ward looks like!



In reality...



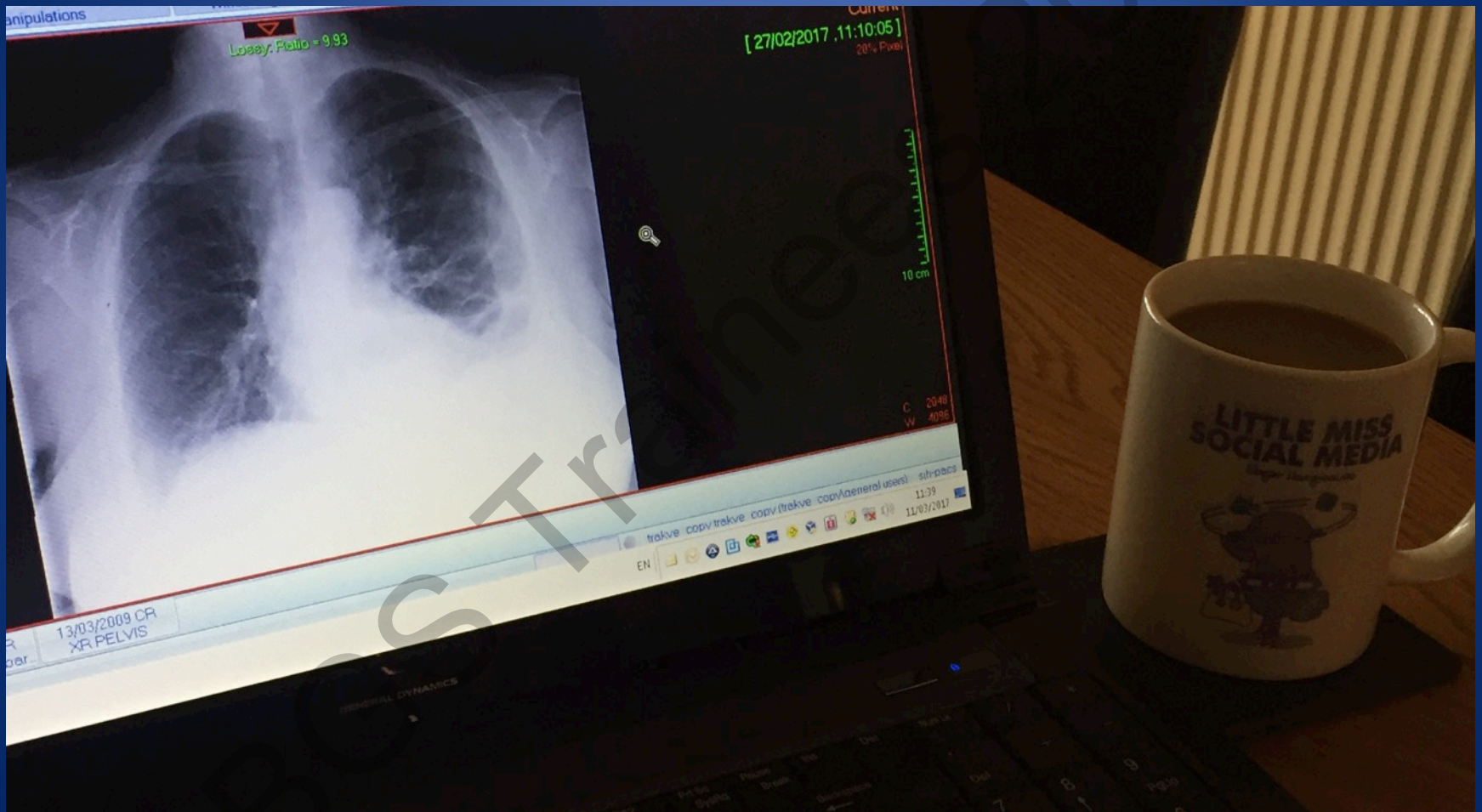
Blood results

ology	☐	29/05/2009	11:44	XR Pelvis	Results	CareStream	Final	01/11/200
	☐	16/03/2009	18:21	XR Pelvis	Results	CareStream	Final	01/11/200
	☐	13/11/2006	18:19	XR Chest	Results	CareStream	Final	09/06/200
	☐			XR Pelvis	Results	CareStream	Final	
	☐	19/06/2006	15:29	XR Pelvis	Results	CareStream	Final	

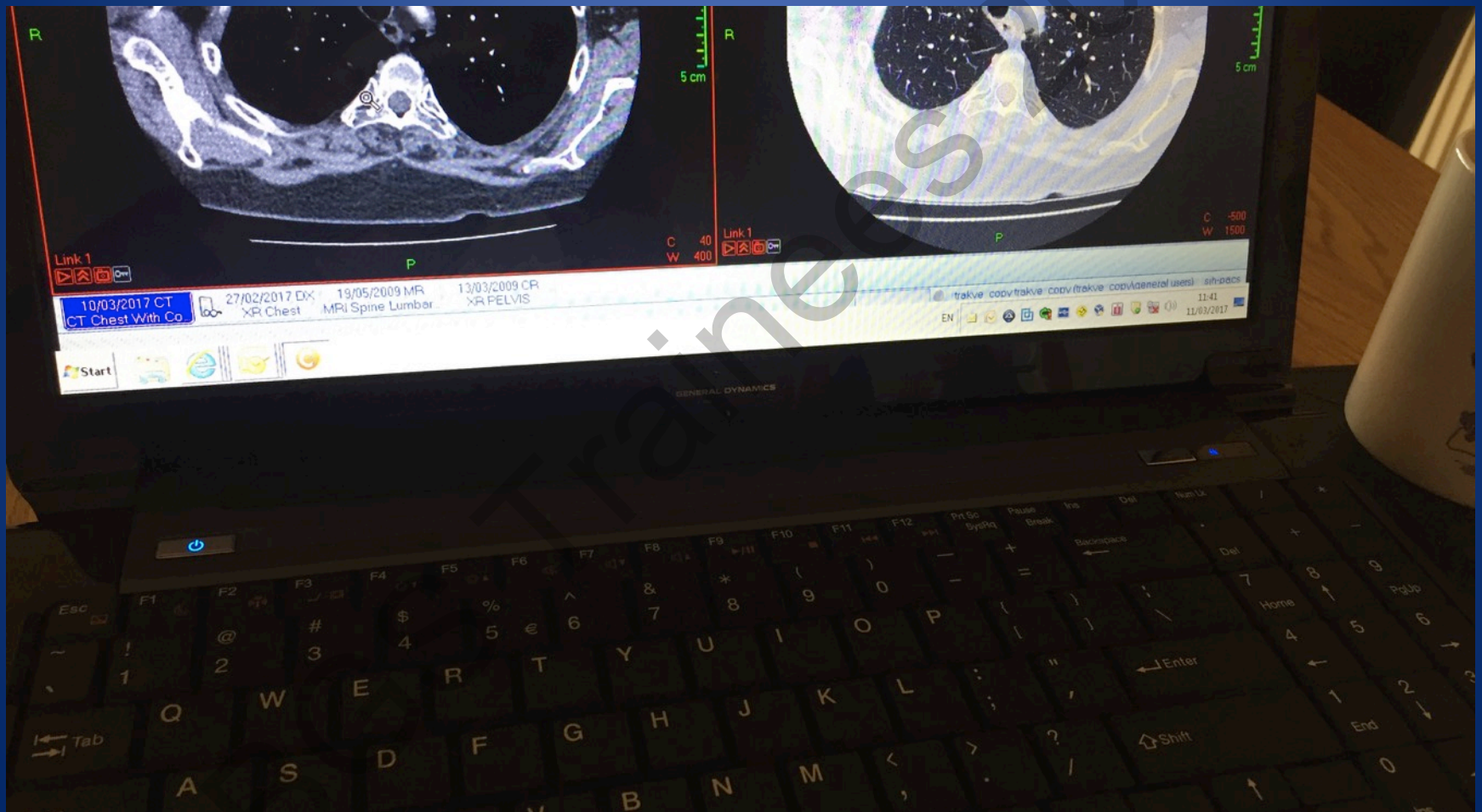
Lab Cumulative Profile: SCLO - All Results [Across All Episodes]									
Cumulative Graph									
Test Items	Reference Range	Units	HB339980B 07/03/2017 09:16	HR289912X 07/03/2017 09:16	HB337696Y 02/03/2017 13:36	HR285718L 02/03/2017 13:36	HB335468A 28/02/2017 08:49	HR 28/02/2017 08:49	HR 28/02/2017 08:49
Haemoglobin	115 - 160	g/L		112		113		117	117
Haematocrit	0.37 - 0.47	ratio		0.345		0.334		0.35	0.35
Red cell count	3.8 - 5.8	10 ¹² /L		3.80		3.76		3.6	3.6
Mean cell volume	78 - 98	fL		91		89		91	91
Mean cell Hb	27.0 - 32.0	pg		29.5		339		335	335
Mean cell Hb conc.	310 - 360	g/L		325		13.7		2.6	2.6
White cell count	4.0 - 11.0	10 ⁹ /L		7.8		10.18		0.8	0.8
Neutrophil Count	2.0 - 7.5	10 ⁹ /L		5.14		1.93		0.8	0.8
Lymphocyte Count	1.5 - 4.0	10 ⁹ /L		1.59		1.19		0.1	0.1
Monocyte Count	0.2 - 0.8	10 ⁹ /L		0.74		0.04		0.32	0.32
Basophil Count	0.01 - 0.1	10 ⁹ /L		0.04		0.32		328	328
Eosinophil Count	0.04 - 0.4	10 ⁹ /L		0.26					
Platelet count	150 - 400	10 ⁹ /L		326					



Radiology...



Fancy radiology...

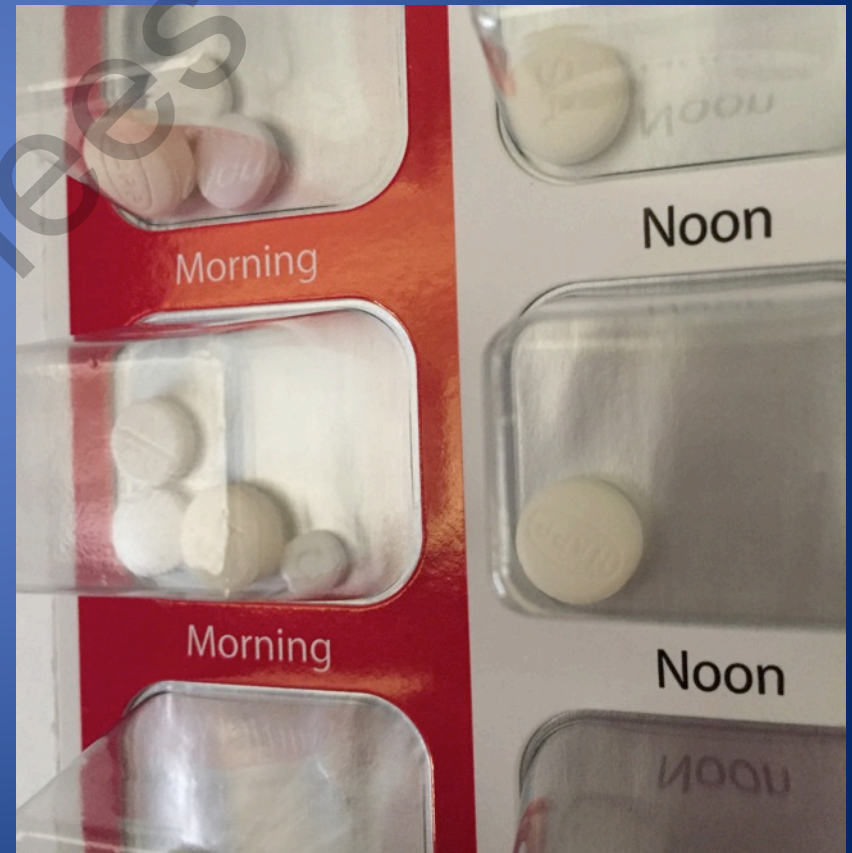


Pharmacy input

Before....



After....



Reasons for Referral to Service:

Infections!

“Cellulitis”

COPD

Cardiac
Failure

Renal
Failure

I’m really not
sure....

General
Deterioration

Pneumonia

Delirium

Diarrhoea

Neurological

Gout

Patient Satisfaction Survey:

- 'This is an amazing service which has enabled me to stay at home and be treated. The nurses are very caring and kind and [++] is a gem"
- 'This is an excellent service and I have been helped twice this year by the team. The nurses are all so kind and caring and good at their particular jobs. The doctor is good at explaining things and giving confidence and so makes me feel better"
- "This is an amazing service. My dad received all the care and attention he would have in hospital but the great thing about the service was that it was carried out at home, saving my dad all the stress of going into hospital which due to his dementia, is very frightening for him"
- 'This was my first experience of the Hospital at Home team and I found the service to be quite exceptional. Each nurse attending me through my illness attained a high standard of competence, diligence and manner beyond my past hospital experiences. I firmly believe that having treatment at home has accelerated my recovery"

It was like the Cavalry coming over the hill...

Oh I felt as if I was the queen getting all that attention

This is the way healthcare should be

I think just being in your own surroundings makes you feel happier and more confident and able to cope.

I believed that this was the most thorough assessment that she had ever experienced

I think it is amazingly impressive

sometimes it's easier to get into hospital than it is getting out

They were marvellous, absolutely marvellous

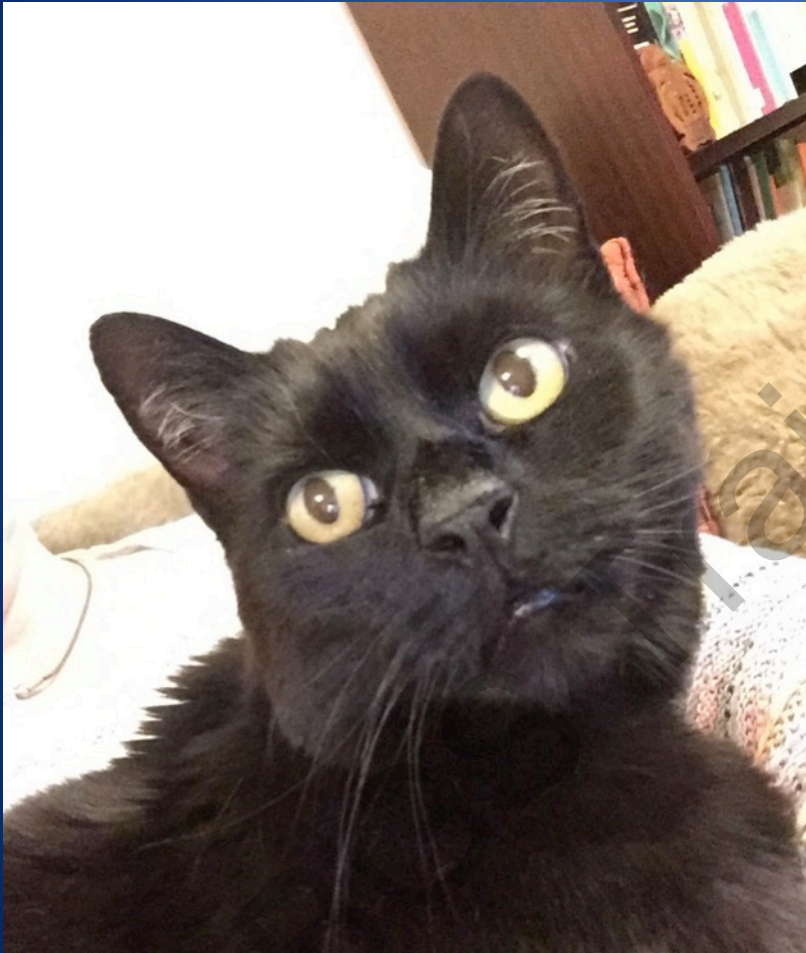
And no danger of some of these awful hospital bugs.

Well it was either the hospital or being in my own home... there was no choice. I mean who would want to go to hospital, when they could be treated just as well if not better at home...

Patient Satisfaction:



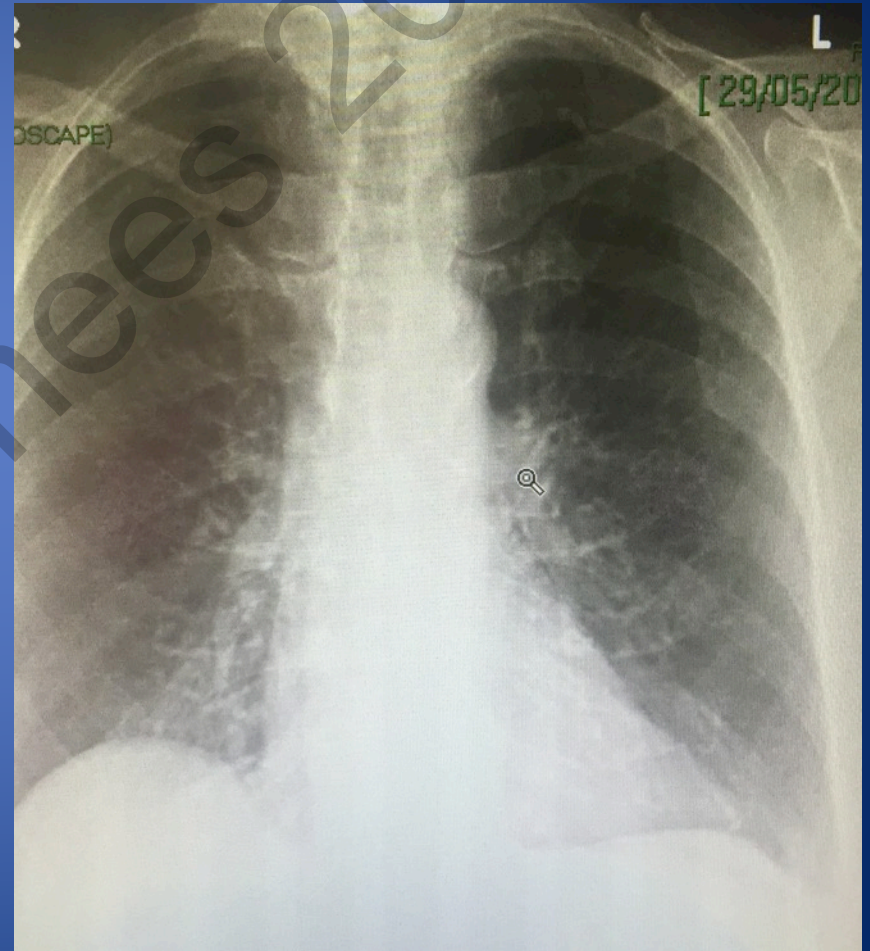
Pet therapy!



Power balance...

- I don't want a scan...
- What happens if I don't have it?
- I'd like to keep those tablets please?
- Will you let my family know what's happening?

#RealisticMedicine
#ChoosingWisely



A couple of stories....

Sam, age 71

Ex miner

Severe COPD

Doesn't "quite fit" criteria for oxygen

O2 sats of 81% during exacerbation

Polypharmacy

Clearly dying.... In bed, chesty, not responding to treatment



Sam – now known as Lazarus....

Treatment:

Rationalise medicines

Sort out nebuliser

“Palliative” oxygen

Lorazepam

Anticipatory meds

DNACPR form

Listened to his wishes...



It's not always about the medical
stuff...

No family of
his own

Nephews
supporting but
unwell

Frequent 999 calls
9x A&E attendance
Multiple admissions

Lives alone

Anxious
Lonely
Cognitive
Impairment

COPD
Bronchiectasis
Congestive heart
failure
CKD
Cortisol insufficiency

Billy



Housing
Dept

Needs and preferences

Doesn't want to be
alone

CPN

Provide
carers

Financial and Legal

Brother is POA but unwell
Lives in council housing
Needs SW funded housing

Family and Support

No family of his own.
Nephew unable to
support

Red
Cross

Liase with
ambulance
service

Health

COPD/Bronchiectasis
Heart Failure
Dementia
CKD
Cortisol insufficiency



Living Situation

Lives alone
3x daily POC

Cognition and Mental Health

Dementia
Anxiety

Rationalise
medication

Optimise
treatment

Review
inhalers

And many more...



The future?

More IT?

Near patient testing?

Mobile radiology?

Liaison with ambulance
service?



Can we have drones please?



Some Stories....

Mr Acorn, age 83



Retired carpenter

Cardiac Failure

Large doses of ACEI and diuretic

Increasingly unwell after episode of diarrhoea....

U 47.3

Creat 342

K 4.8

Digoxin level OK

Mr Acorn's treatment



- Monitoring of pulse/BP
- Medication Holiday!
- Monitoring kidney function
- Physio

Further echo declined
Anticipatory planning...

Mrs Willow, age 93

Ran a flower shop

Has dementia

Four times daily care

Increasing confusion –

?UTI

Reduced fluid intake



Mrs Willow's progress



Family Goals:

Not “End of Life” just yet?

Urine sample negative

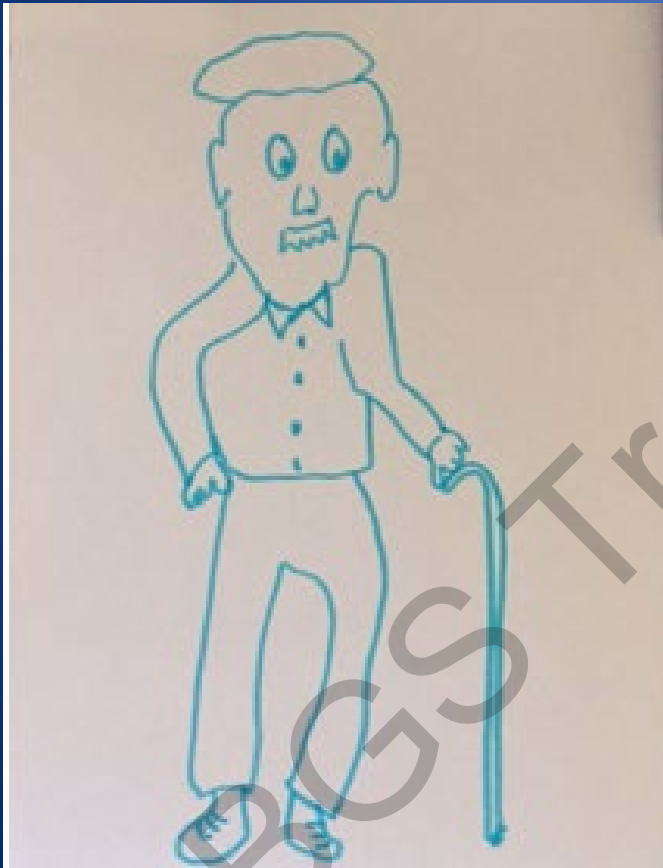
Blood tests fine

Poor oral intake

Given subcutaneous
fluids....

Quietly improved...

Mr Cherry



Retired school teacher

Anxiety and possible early dementia

Not eating or drinking well

Refusing Day Hospital

Has he got cancer?

Family worried...

Mr Cherry's investigations

- Bloods unremarkable, though albumin 32
- CT scan of chest, abdo, pelvis – no malignancy!

Mirtazepine and a befriender service now working well...



Mrs Maple

Ex missionary worker in Africa.

Recurrent urinary infections

Confirmed on culture –
but only sensitive to
gentamicin ☹️

Dysuria, suprapubic pain



IV treatment for Mrs Maple



Given IV gentamicin

Do I have to take ALL these other tablets?

Polypharmacy reviewed...

Mr Ash, age 94



Ex army serviceman

Swims regularly in local pool

Hot, inflamed red leg

Yes – it WAS cellulitis!

IV treatment at home

Mrs Hawthorn

Lung Cancer

High serum calcium

Agoraphobia

Terrified of delirium

SC fluids

IV zoledronate



Mrs Rowan

Retired nursing auxilliary

Severe heart failure

- Increased oral diuretic
- IV diuretic
- Metolazone
- Fragile kidney function



Mr Pine, age 79



- Retired butcher
- Exacerbation of COPD
- Iron deficiency anaemia
- Caecal tumour
- Respite in Community Hospital
- Hospice follow up

Mrs Birch, age 84

Self neglect

Dementia

Care home resident

Unwell, chesty, unable to swallow

Given IV therapy in care home

Recovered from pneumonia, but 6 weeks later, further deterioration and comfort care given

