Virtual Wards: our journey

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NHS
The Dudley Group
NHS Foundation Trust

CARE RESPECT RESPONSIBILITY

What is a virtual ward

Definition

What a virtual ward is, and what it isn't

NHS

virtual ward

'və:tʃu(ə)l wɔ:d

A virtual ward is a safe and efficient **alternative to NHS bedded care** that is enabled by technology.

Virtual wards support patients who would **otherwise be in hospital** to receive the acute care, monitoring and treatment they need in their own home.

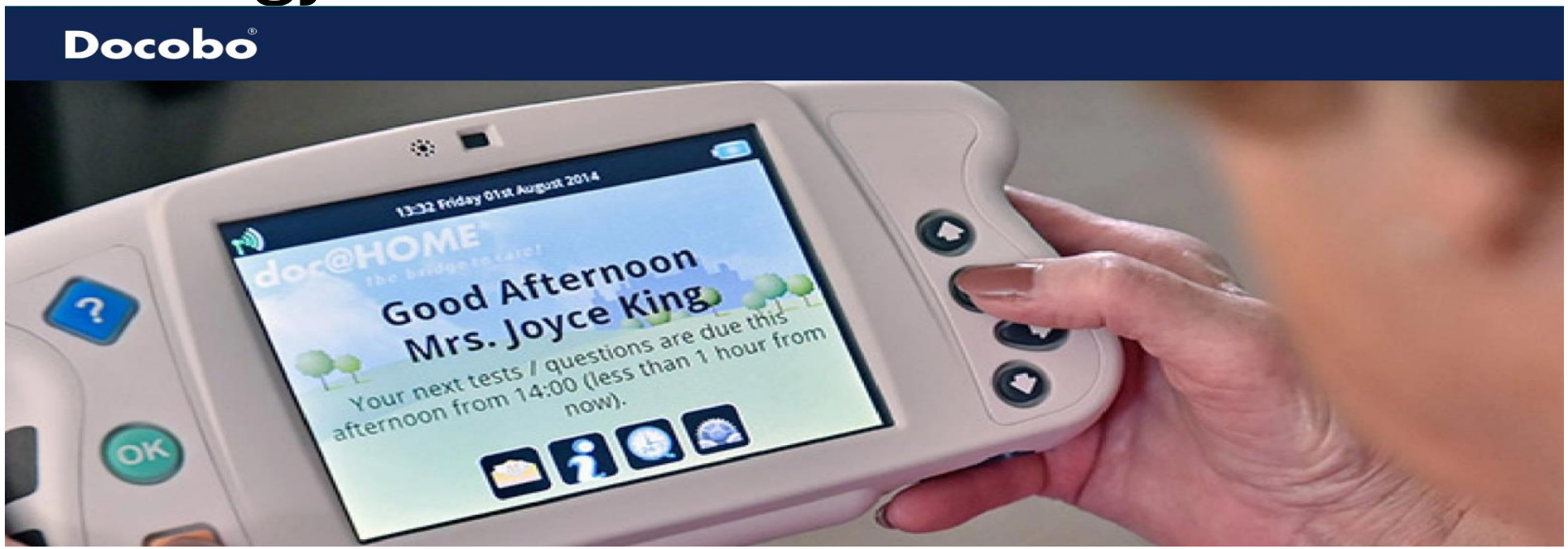
This includes either **preventing avoidable admissions** into hospital, or **supporting early discharge** out of hospital.

NB: A virtual ward **is not** a mechanism intended for enhanced primary care programmes; long-term condition management; intermediate or day care; safety netting; proactive deterioration prevention; or social care for medically fit patients for discharge.

In the beginning.

- +ve experience of covid virtual ward
- Community respiratory team in-reaching into ED and wards
- Safe and effective but basic

Technology enabled



- ICB purchased Docobo remote monitoring
- Home SpO_2, NiBP and temperature
- Tablets given to patients twice daily question sets
- Allows clinical team to prioritise time

Respiratory First

- Natural progression from COVID into respiratory
- Secondary care led step down model
- Demonstrated reduced LOS
  - COPD 4.1 (Dec 20) vs 2.9 (Dec 21)

Expansion

1. Paediatrics
2. Frailty
3. Acute Respiratory Infection
4. Intestinal failure – Complex Nutrition
5. Cardiology
6. Acute medicine

Challenges – the model in paediatrics

- Initial covid ward was single system disease
- Initial thoughts was to apply VW principles for children with RSV type illnesses
- Team resistant – need for higher acuity patients with complex needs
- 12 beds –tech enabled linked with community outreach team
- “*At The Dudley Group NHS Foundation Trust, local mum, Anum Shazady, praised the virtual ward for keeping her son out of hospital, with twice daily calls from NHS staff.*
- *Anum said: “Now my son is on the virtual ward I can record his observations as many times as I want throughout the day, recording them onto the virtual ward pad and a member of staff calls me twice daily which reassures me that he is safe in our home environment. The new virtual ward is great for me and my family as it stops my son staying in hospital longer than he needs*.”

Challenges – Clinical buy in (ARI)

- New models of care generate some uncertainty – especially around responsibilities and liabilities
- Friction between teams around follow up and “named” consultant
- Planned and for 24 beds
- 3 month pilot maximum of 2 used
- Concerns around “gatekeeping”

Acute Medicine – second attempt

- MDT approach with AMU, community and specialist teams
- Patients onboarded firm both acute assessment unit and community rapid response teams
- Movement between VWs if underlying morbidity discovered.

Cost effective?

BMJ Open **Length of stay and economic sustainability of virtual ward care in a medium-sized hospital of the UK: a retrospective longitudinal study**

- “clinically effective for survival and patients not needing readmission”
- Cost for each bed day freed higher than the one for a single day hospital bed.

Local Impact.

- Total cost of programme roughly equivalent to running 2 bedded in-patient area.
- Total 66 beds with average occupancy of 78%

Activity

Number of patients

Year	2023												2024			Total
Ward	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	
Virtual Ward 01 - Respiratory	70	37	35	57	49	49	49	40	48	59	69	82	67	72	25	**808**
Virtual Ward 03 - Frailty	17	19	23	21	27	25	23	22	30	34	35	33	58	48	25	**440**
Virtual Ward 04 - Paediatrics	52	33	38	33	41	24	30	33	21	67	75	58	49	47	19	**620**
Virtual Ward 07 - Heart Failure			4	5	4	6	8	9	12	12	13	13	15	14	5	**120**
Virtual Ward 09 - Complex Nutrition						9	13	12	10	13	17	19	22	28	6	**149**
Virtual Ward 10 - AMU											6	54	73	69	23	**225**
Total	**139**	**89**	**100**	**116**	**121**	**113**	**123**	**116**	**121**	**185**	**215**	**259**	**284**	**278**	**103**	**2362**

Summed bed days

Year	2023												2024			Total
Ward	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	
Virtual Ward 01 - Respiratory	485	315	240	407	296	368	417	199	386	494	509	530	413	423	97	**5579**
Virtual Ward 03 - Frailty	84	164	319	176	261	214	259	206	243	358	247	223	392	317	83	**3546**
Virtual Ward 04 - Paediatrics	203	156	189	184	137	138	166	116	72	222	245	248	198	191	67	**2532**
Virtual Ward 07 - Heart Failure			13	24	45	39	51	80	76	130	154	133	166	99	31	**1041**
Virtual Ward 09 - Complex Nutrition						110	98	161	98	113	134	167	157	124	19	**1181**
Virtual Ward 10 - AMU											20	173	215	233	61	**702**
Total	**772**	**635**	**761**	**791**	**739**	**869**	**991**	**762**	**875**	**1317**	**1309**	**1474**	**1541**	**1387**	**358**	**14581**

Number of patients

Year	2024																													Total
Month	February																	March													
Ward	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	Total	1	2	3	4	5	6	7	8	9	10	11	Total	
Virtual Ward 07 - Heart Failure		2					2		1				1	1		1	**8**	1		1		1	2						**5**	**13**
Virtual Ward 09 - Complex Nutrition			3	1				1		5				2	1	3	**16**	1	1			1		1		2			**6**	**22**
Virtual Ward 04 - Paediatrics		2	8	2		1	2	2		1	2		2	2	3	4	**31**	4	2	1	1			7	1	2		1	**19**	**50**
Virtual Ward 03 - Frailty			6	3	1	2	1	3	1		3		4		2	3	**29**	3	1	4	1	4	1	1		6	3	1	**25**	**54**
Virtual Ward 10 - AMU	1	2	2	4	2	5	3	4	3	2		2	3	1	1	4	**39**	1	4	1	2		3	3	1	4	1	3	**23**	**62**
Virtual Ward 01 - Respiratory	9	3	3	1		3	3	2	4	3		1		4	2	5	**43**	3	1	1	6	3		5	4	1		1	**25**	**68**
Total	**10**	**9**	**22**	**11**	**3**	**11**	**11**	**12**	**9**	**11**	**5**	**3**	**10**	**10**	**9**	**20**	**166**	**13**	**9**	**8**	**10**	**9**	**6**	**17**	**6**	**15**	**4**	**6**	**103**	**269**

Opprtunities

- Research – engaged local research network looking at impact and effectiveness
- Economy of scale – blended teams
- GIRFT – expand step up model, digital exclusion
- New wards– palliative care in development.

Case study

- **12 months prior to admission to virtual ward**
- 12 ED/SDEC attendances due to AKI, electrolyte derangements
- 52 days as an inpatient over 12 months
- **12 months after admission to virtual ward and ongoing nutrition team support**
- 2 SDEC attendances due to new onset AF electrolyte derangements
- 1 ED electrolyte derangements
- 2 hospital stays equalling 5 days in total (90% drop in hospital attendance)
- Severely impairing the patient's quality of life. The patient's general practitioner (GP) recommended the patient's admissions due to potentially fatal electrolyte imbalances and renal failure. On their final admission via ED, for management and continuity of care the patient was supported through virtual ward with an early discharge from secondary care. Whilst on the virtual ward the patient was closely monitored by the nursing staff for a total of 11 days. This enabled them to be stabilised with the correct, blood monitoring, drug titration and once weekly day-case fluid regime. This prevented further admissions to hospital and enhance their quality of life. The patient expressed gratitude for VW's exceptional quality of care and ongoing support as they were able to "regain their life back" and resume their fishing hobby and enjoy holidays once again.
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