



*Open Ward*

## **Solution Overview**

[www.openward.com](http://www.openward.com)



## Introduction

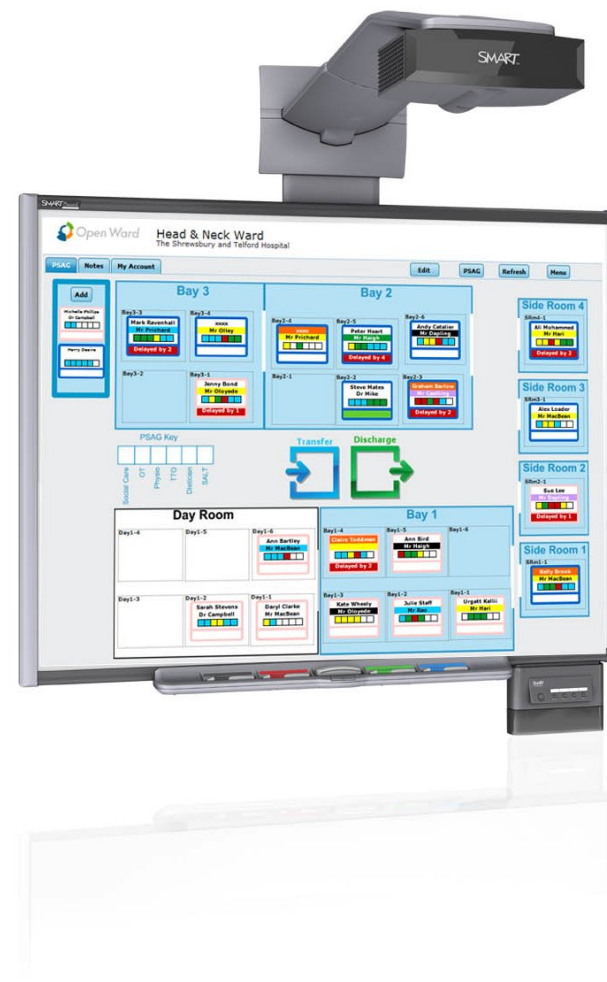
Openward is a graphical Patient Status software application designed to help frontline staff manage patient and bed status information at a ward or departmental level using an intuitive touch enabled application that works seamlessly in existing clinical processes.

The system is designed to provide a powerful and simple to use visual management tools that when deployed can:

- Reduce interruptions
- Save staff time looking for patient information
- Make the patient journey from admission to discharge run smoothly without delays
- Increase direct care time
- Provide accurate and timely bed status information

Information and security in OpenWard is handled on a Trust wide basis allowing appropriately authorised clinical staff to view & manage patient information from any networked Trust PC via a web browser.

The solution can be enabled to draw down demographic and ADT feeds using an HL7 interface from PAS and other Hospital information systems.



## Traditional patient status display

DISCHARGED FROM 5 WARD

NAMES.	WARD	REAL	DATE	NAMES	WARD	REAL	DATE
MARGARET HAYLET	SS	SS	18/9 11:30	MARGARET HAYLET	COB	BU	18/9 11:30
STEPHAN BIRAS	H	H	18/9 11:30	JANE ASHLEY	GS	GS	18/9 11:30
SONIA HAYSON	H	H	18/9 11:30	ANNA D'AMBROSIO	CR 7		18/9
MARGARET HOLLINS	GS	GS	18/9 11:30	DAPHNE BOGLEY	MNDW		18/9 2:30
LAWRENCE HARRIS	H	H	18/9 11:30	ANU LEWIS	SW		18/9 2:30
PETER CHAMBERLAIN	QU	QU	18/9	PAUL PASTUSZKO	GS		18/9 2:30
MARCO SIMONINI	PSY	GS	18/9	CATHARINE TOLK	GS		18/9 2:30
JACQUELINE THOMPSON	PSY	GS	18/9	ANUSUYA SHAKUMAR	GU		
DAVID TAMERSON	H	H	18/9	MARA FORNARDI	GS		
SUZAN JONES	H	H	21/9	LACHEL D'ARRI	QU		
LEONARD SWELLING	ANY	QU	18/9 11:30	JUAN TORRES	RIP		18/9 11:30
DAPHNE WOLFE	BU	BU	18/9 11:30	MARY DONOHUE	BRW-MO		18/9 2:30
STEPHEN ROSSIGNOL	H	H	18/9 11:30	John Brown	H	H	18/9
STEPHEN BRYAN	SS	SS	18/9 11:30	Philip Pearce	H	H	18/9
THERESA AUSTIN	SS	SS	18/9 11:30	ANNA D'AMBROSIO	GS		18/9 11:30
KIRBY SANDERS	H	H	18/9 11:30				
ROBERT GUY	H	H	18/9 11:30				
SUZANNE ALBERT	H	H	18/9 11:30				
JOHN-PAUL BIRAS	H	H	18/9 11:30				
ROY SMOALL	GS	GS	18/9 11:30				



# A new approach to ward based patient status boards





# Tabular Patient Status Display

Open Ward **Ward D58** Nottingham University Hospitals NHS Trust Current user: None

Ward Notes Refresh Menu

Add Waiting Edit Move Show All PSAG Add Waiting Edit Move Show

Bed	Hospital Number	Name	Consultant	Nurse	Predicted discharge date	Days on ward	Med Fit	Destination	Today/Waiting For	Physic	TTO	OT	Oxygen	Other	Updated by
T1	1	Jimmy Steel	JC1	Marc Calderon	17-Jun	24		Other hospital	X-ray required	CMP	CMP	REQ	CMP	WIP	24/06/09 2312
T2	2	Jeeny Derwent	SJ	Marc Calderon	17-Jun	23	Yes			REQ	REQ	WIP	CMP	WIP	24/06/09 2312
T3	23847894	Steve Mates	SJ	Sonny Mandac	25-Jun		No	Other hospital							24/06/09 2312
T4	36578236	Sarah Lowe	SJ	Rhona Albazzazz		37					REQ	WIP	WIP	NRQ	24/06/09 2312
T5	987896432	Kerry Gilder	JC1	Rebecca Lacey		23									24/06/09 2312
T6															
B1	2348783	Ally Giles	WJK	Rebecca Lacey		53				CMP					24/06/09 2312
B2															
B3															
B4	923842893	Lilly Hertz	JC1	Alison Hulbert	16-Jun	24		Berman 1		CMP	REQ	CMP	REQ		24/06/09 2312
B5	726374	Sarah Stevens	JC1	Malanie Calvert											24/06/09 2312
B6	8124696	Kerry Bradshaw	WJK	Luisa Avanzado	12-Jul	85	Yes	Hay House			REQ	WIP		NRQ	24/06/09 2312
R1	234783	Stephanie Bell	SW3	Malanie Calvert		33									24/06/09 2312
R2	78776783	Michelle Phillips	JC1	Rhona Albazzazz		23									24/06/09 2312
R3	5	Terry Gore	JC1	Marc Calderon	08-Jun	48				REQ	REQ	WIP	CMP	WIP	24/06/09 2312
R4	2936592356	Sarah Sandcastle	SW3	Rebecca Lacey		79					NRQ				24/06/09 2312
R5	98237472	Jerry Norman	JC1	Malanie Calvert		22									24/06/09 2312
R6	7	Sharon Vinacomb	JC1	Marc Calderon	17-Jun	24				REQ	REQ	WIP	CMP	WIP	24/06/09 2312
G1	2367632	Gillian James	SW3	Malanie Calvert		17					REQ	REQ	WIP		24/06/09 2312
G2	8787324	Dameon Hill	WJK	Rebecca Lacey											24/06/09 2312
G3	59756	Carl Singh	SW3	Joanne Tarpey	20-Jun	16	Yes	Home	social work	WIP	WIP	REQ	CMP	REQ	24/06/09 2312
G4	6	Fred Harrison	SW3	Marc Calderon	23-Jun	80		Barc TU		NRQ	REQ	WIP	CMP	WIP	24/06/09 2312
G5	7878923	Paul Nash	JC1	Malanie Calvert		44									24/06/09 2312
G6	6768233	Graham Barlow	JC1	Malanie Calvert		85									24/06/09 2312
SR1	67348533	Derek Lambert	SJ	Rebecca Willis		69				REQ	WIP	CMP	REQ		24/06/09 2312



Welcome to Ward 16  
The Shrewsbury and Telford Hospital

PSAG Notes My Account Refresh Menu

**Ann B**  
Dr Mike  
18/06/2009

569741  
Dr Campbell  
18/06/2009

**Bay C**

22 **John Brown**  
Mrs Jones  
22/05/2009

21 **Andy Moo**  
Dr Mike  
01/06/2009

23 **Tim Reid**  
Mr Caldwell  
03/05/2009

24 **Martin Lomax**  
Mr Cook  
09/12/2008

25

20 **Anthony**  
Mr Singh  
06/05/2009

**Bay B**

13 **Simon Wylde**  
Mr Brown  
05/05/2009

12 **Robert Cook**  
Mrs Jones  
06/05/2009

14 **Andrew Hadley**  
Mr Brown  
15/05/2009

11

15 **Oliver Jones**  
Mr Cook  
15/04/2009

10

16 **Andy Fergusson**  
Dr Campbell  
13/12/2008

17 **Melissa Monitz**  
Mr Black  
07/05/2009

18 **Lynne Coldwell**  
Dr Campbell  
24/10/2008

**Bay A**

7 **Lilly Flintoff**  
Mrs McDonald  
01/05/2009

6 **Kerry Bradshaw**  
Mr Brown  
20/10/2008

8 **Vicky Genever**  
Mr Cook  
04/05/2009

5 **Maggie Jones**  
Mr Singh  
20/05/2009

9 **Jenda Singh**  
Mr Cook

3 **Andrew K**  
Mrs Brown  
20/05/2009

2 **Gerry Springfield**  
Mrs Jones  
11/12/2008

1 **Jack Frost**  
Mr Brown  
20/01/2009

**Transfer**

**Discharge**

**PSAG Key**

Social Work	OT	Physio	Transport	TTO



# The Business Case for Investing in OpenWard

The Benefits both Clinical and Financial





Nurses and doctors are the first point of reference for up to date information on, well, everything. A recipe for interruptions that can get in the way of caring for patients.

OpenWard quickly becomes the centre of attention for up-to-date information which frees caring staff to do what they do best.



Whatever your role, complete, accurate, real-time data is the key to efficient management, yet thoroughbred systems are often hamstrung by inaccurate and untimely data.

OpenWard is designed to make data entry quick, easy, and part of the normal line of care - which means every carer, keeping all the data, up-to-date, all the time



OpenWard is a visual system which reduces the burden of administration for clinical staff meaning they have more time to spend with patients.

Simple to use, the clear patient status information leads to timely care and improved patient journeys.



## Working with OpenWard

- OpenWard has been specifically designed to support ward based staff in the management of patients through the care pathway.
- By allowing them to identify and track progress against key activities OpenWard provides staff with visual management indicators that quickly identify outstanding tasks & potential blockages that unchecked will lead to delayed discharge.
- So how does this work in a typical patient stay:



## A typical patient stay

- Upon arrival patient details are quickly added to OpenWard and an initial assessment of care needs is identified:
  - Physiotherapy
  - Social care
  - Pharmacy
- Once added simple use of colour and status allows clinical staff to identify those things required but not yet underway or partially complete.
  - Physiotherapists and Pharmacists now update progress against required actions and utilise information on planned stay to prioritise actions.
- Interruptions for nursing staff reduce as OpenWard provides carers with clear and trusted information on patient location and progress through the pathway.
- Estimated discharge dates guide MDT members in the anticipated schedule to discharge with Doctors able to confirm when patients become medically fit.



## How does OpenWard enable carers?

- Quite simply OpenWard becomes a trusted source of reference information so:
  - All staff believe and own the information and become responsible for keeping it up to date.
  - Patient locations and activity statuses are accurate meaning less interruptions.
  - Nursing handover documents are easily printed saving time and reducing transcription errors.
  - All carers take ownership for the maintenance of their information.
  - All members of the multi-disciplinary team are aware of the activities still outstanding and the key dates on the patient pathway.

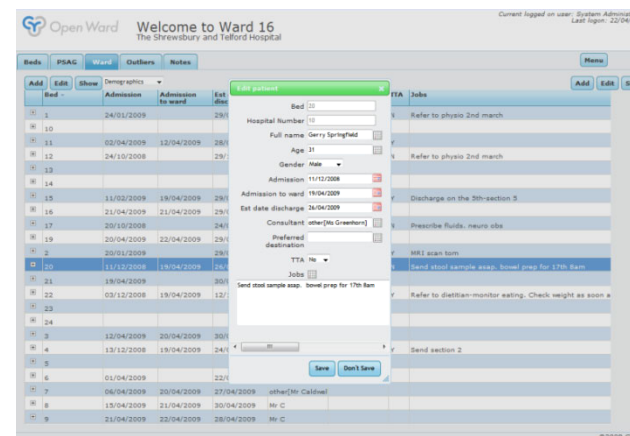
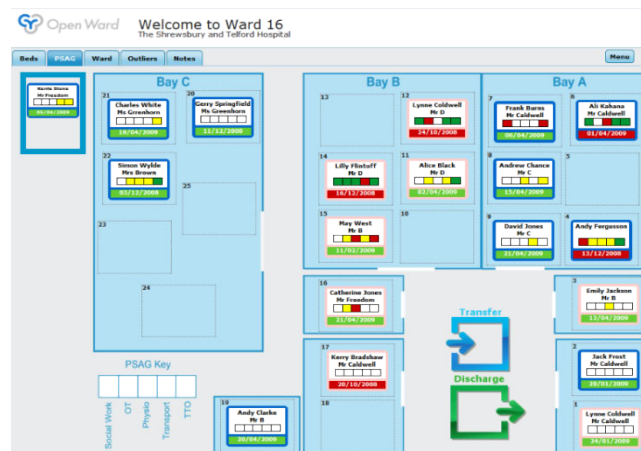
- Benefits arrive in a number of ways
  - MDT members such as physios and dieticians gain a much clearer view of the current care schedule allowing them to prioritise and focus on those patients nearing medically fit status.
    - Ensuring that each ward sends one patient home a month with one day less delay can save a typical ward £7500 per annum
  - Nurses suffer less interruptions and can work from more reliable information, allowing them to spend less time on admin and more on patient care.
    - Printing handovers, updating ward boards from local PC's and not being interrupted for current information can easily save a nurse 3 minutes a shift.
    - And more importantly provide a typical hospital with over 2000 extra man-days a year in patient focused time that used to be lost to admin.
    - This time allows nurses to reduce unnecessary delayed discharges, improve the patient experience and recover time for nursing.

- OpenWard provides carers with a number of enablers that:
  - Reduce admin and interruptions.
  - Provide clear MDT understanding of the care required and it's current status.
  - A trusted source of information accessible within the clinical process.

# Digital Patient Status Displays

## The benefits

- It makes shift handovers quicker and safer for the patient
- It affects the proportion of direct care time
- It saves time looking for patient information
- A strong but simple visual statement of change.
- Manage and electronically record key patient care and bed status information through the clinical processes, reducing administration.
- When blended with hardware such as a SMART board and mobile devices the opportunity for improved collaboration and improved access to information becomes a reality.





# The Business Case for Investing in OpenWard

## The Financial Benefits





# Realising the Benefits - Annually

- Close beds and reduce use of agency staff

Or

- Increase elective activity to utilise the bed days available

	Number of Wards	Number of beds	Cost per bed per day	Annual cost £m	Savings from closing beds			Savings from increasing elective activity			
					Close beds %	Close beds Volume	Close beds Costs saved	Bed days gained	Joint replacement	Hip replacement	Minor infection
<b>Sml Hospital Trust</b>	25	750	£ 200	<b>£54m</b>	1.00%	7.5	<b>£547,500</b>	2738	<b>£1,070,363</b>	<b>£1,099,212</b>	<b>£1,437,188</b>
<b>Med Hospital Trust</b>	50	1500	£ 200	<b>£109m</b>	1.00%	15.0	<b>£1,095,000</b>	5475	<b>£2,140,725</b>	<b>£2,198,423</b>	<b>£2,874,375</b>
<b>Large Hospital Trust</b>	75	2250	£ 200	<b>£164m</b>	1.00%	22.5	<b>£1,642,500</b>	8213	<b>£3,211,088</b>	<b>£3,297,635</b>	<b>£4,311,563</b>
								<b>LOS (Days)</b>	10	13	1
								<b>PBR Value</b>	£3,910	£5,220	£525

The above savings based on just a 1% improvement



# Realising the Benefits

## Reducing Length of Stay - Potential Cost Benefits

Number of Wards	Number of beds	Cost per bed per day	Average Length of stay (ALOS)	% Improvement in reducing ALOS	Total bed days available	Total patients per year	Extra bed days from improvement	Extra patients utilising saved days	Incremental revenue per patient	Additional revenue from additional patient stays
50	1500	£750.00	8	1.00%	547500	68438	5475	684	2000	£1,368,750.00
1	30	£750.00	8	1.00%	10950	1369	110	14	2000	£27,375.00
50				0.02%			100	12.5	2000	£25,000.00
1				0.22%			24	3	2000	£6,000.00



# OpenWard

Where we are and what are customers are saying





## OpenWard Charter Customer Sites



Nottingham University Hospitals **NHS**  
NHS Trust

OpenWard 5 ward customer site

The trust has purchased 71 OpenWard SMART large format interactive displays including support and installation services for a year long trust wide deployment across two hospital sites.



The Shrewsbury and Telford Hospital **NHS**  
NHS Trust

Ongoing OpenWard 5 ward customer using the solution across two hospital sites.



West London Mental Health **NHS**  
NHS Trust

Live OpenWard virtual ward pilot across two hospital sites. Equipment and software installed and operational since February 2008.



# On the Ward with OpenWard

**Some of the Improvements we have seen so far on our Ward:**

**Nursing interruptions have already been reduced** as staff and managers now refer to the board for info rather than asking us

Adding patients **is no more labour intensive than writing them on the board** and moving them between beds is really easy

Updating the board **has become the responsibility of everyone** on our ward which has meant we have had more time to care for our patients

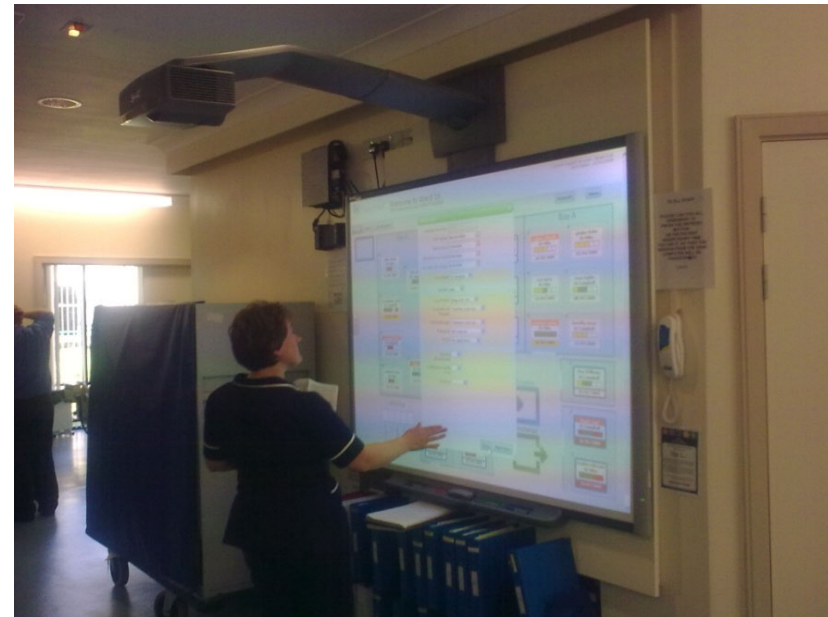
Patient status at a glance **is helping us target and understand discharge delays**, the pharmacist commented on the fact that he could easily see which patients were scheduled to go home and plan for it in advance

Ongoing **staff training has proved to be minimal** and no overhead for us

We think interfacing **will save us significant time** on admission, transfer and discharge planning

“Everyone is really enthusiastic about OpenWard which is proving to be a great draw to the ward, everyone from the chief exec to some of the community care teams have been for a nose”

“the chief exec commented on the fact that he could easily see which consultant had the most delays”



Ward 16 ,Princess Royal Hospital, Telford - 28<sup>th</sup> May 2009