# Ballarat Health Services

Ballarat **Health**Services
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## MOTIVATING IMPROVEMENT USING MEANINGFUL DATA IN A REGIONAL CHEMOTHERAPY DAY UNIT

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SAFER BETTER HEALTHIER

Abstract: This work was undertaken at the Chemotherapy Day Unit of Ballarat Health Services in Victoria, Australia by a team comprised of the redesign lead, nursing, and clerical staff. The need for current data that was easily understood by staff was highlighted in the Victorian Chemotherapy Service Redesign Project (VCSRP). The lack of access to real-time performance data led to assumptions about capacity, demand, and delays to patients on the day of treatment

The Meaningful Visual Data intervention was comprised of group sessions with unit staff on understanding the data and setting meaningful measurements. Initial sessions occurred over a 4-week period during weekly team meetings.

Meaningful data was then displayed, utilizing the "3-second rule", at the main work station and updated daily. Data was discussed at weekly staff meetings with the goal of understanding the cause of and reducing variance. Staff reported an increased understanding of the performance data and its relation to their daily work, which in turn enabled prompt correction of non-value added time for patients on the day of treatment.

Meaningful Visual Data demonstrates the benefit of providing staff quick, easy to understand, and current performance data when doing improvement work. Understanding what constituted meaningful data and a simple visual method to understanding the data was key to the success of the improvement project. The use of Meaningful Visual Data is now being used in other projects and units throughout Ballarat Health Services.

## CHEMOTHERAPY DAY UNIT

## Meaningful Data & Improvement

**Actual Utilization**

| May-13 | | | | |
|---|---|---|---|---|
| | | 63.91% | 45.40% | 33.35% |
| 32.38% | 39.46% | 69.17% | 74.73% | 44.60% |
| 39% | 38% | 63% | 47% | 39% |
| 56% | 43% | 49% | 47% | 42% |
| 65% | 33% | 51% | 58% | 57% |
| | | 49.10% | | |

| Jun-13 | | | | |
|---|---|---|---|---|
| 63.01% | 66.23% | 71.45% | 56.43% | 52.23% |
| 82% | 74% | 38% | 50% | 58% |
| 58% | 58% | 66% | 56% | 110% |
| 100% | 51% | 71% | 67% | 60% |
| | | 63.45% | | |

| | | | Jul-13 | |
|---|---|---|---|---|
| 113% | 74% | 96.19% | | |
| 46.09% | 59.72% | 95.24% | 70.14% | 122.92% |
| 68% | 74% | 97% | 65% | 57% |
| 42% | 42% | 49% | 55% | 48% |
| 43% | 50% | 71% | 35% | 58% |
| | | 67.65% | | |

| Aug-13 | | | | |
|---|---|---|---|---|
| | | | 87.40% | 79.58% |
| 44% | 63% | 106% | 107% | 78% |
| 68% | 79% | 70% | 80% | 79% |
| 63% | 74% | 82% | 49% | |
| | | 75.56% | | |

**Goal:** Implement the use of timely, accurate and meaningful data to improve performance and outcomes of the Chemotherapy Day Unit.

**Purpose:** Utilising meaningful visual data helps staff understand ward performance and moves decision making from being based on opinion and hearsay to being based on fact.

**Why do it?**
- Understand how the ward is doing against continuous improvement activities (in real time)
- Easily recognise the impact of changes
- Processes flow more smoothly when everyone can see how the process is working in real time

**How:**
- Collect data to assess current performance
- Display the measures on a display board which is visible to everyone
- Update measures daily and take action on what the data tells you
- Ensure everyone understands the measures
- Use visual management to communicate the status within 3 seconds

**Visual Data & the 3-second Rule:**
- Simple
- Clear
- Real time
- Based at point of use
- Available to all
- Shows progress toward agreed goal
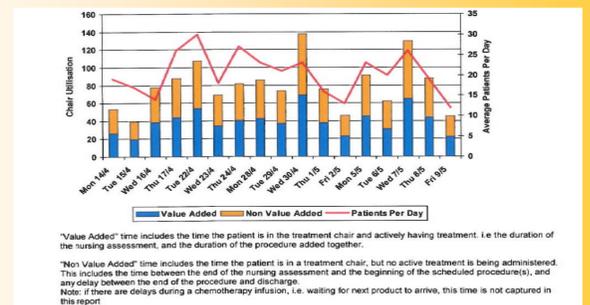
**Making it Meaningful:**
1. What do we need to know to perform the right work at the right time?
2. What do we need to share? What knowledge could be useful to perform work or do it better without asking multiple questions?

**The above Data:**

Left—reflects on-time length of treatment by month and day

Right—indicates actual chair utilization. Each month the team set new targets

**6-month sustainability:** Chair utilisation has remained over 67% and on-time length of treatment remains over 70%. Non-value added chair time has been identified and the team is working with medical and pathology services to improve outcomes and processes.



"Value Added" time includes the time the patient is in the treatment chair and actively having treatment. i.e the duration of the nursing assessment, and the duration of the procedure added together.

"Non Value Added" time includes the time the patient is in a treatment chair, but no active treatment is being administered. any delay between the end of the procedue and discharge.
Note: if there are delays during a chemotherapy infusion, i.e. waiting for next product to arrive, this time is not captured in this report

Meaningful Visual Data helps identify areas for further improvement