



# **Surgical Site Infection (SSI) Surveillance NHS Tayside**

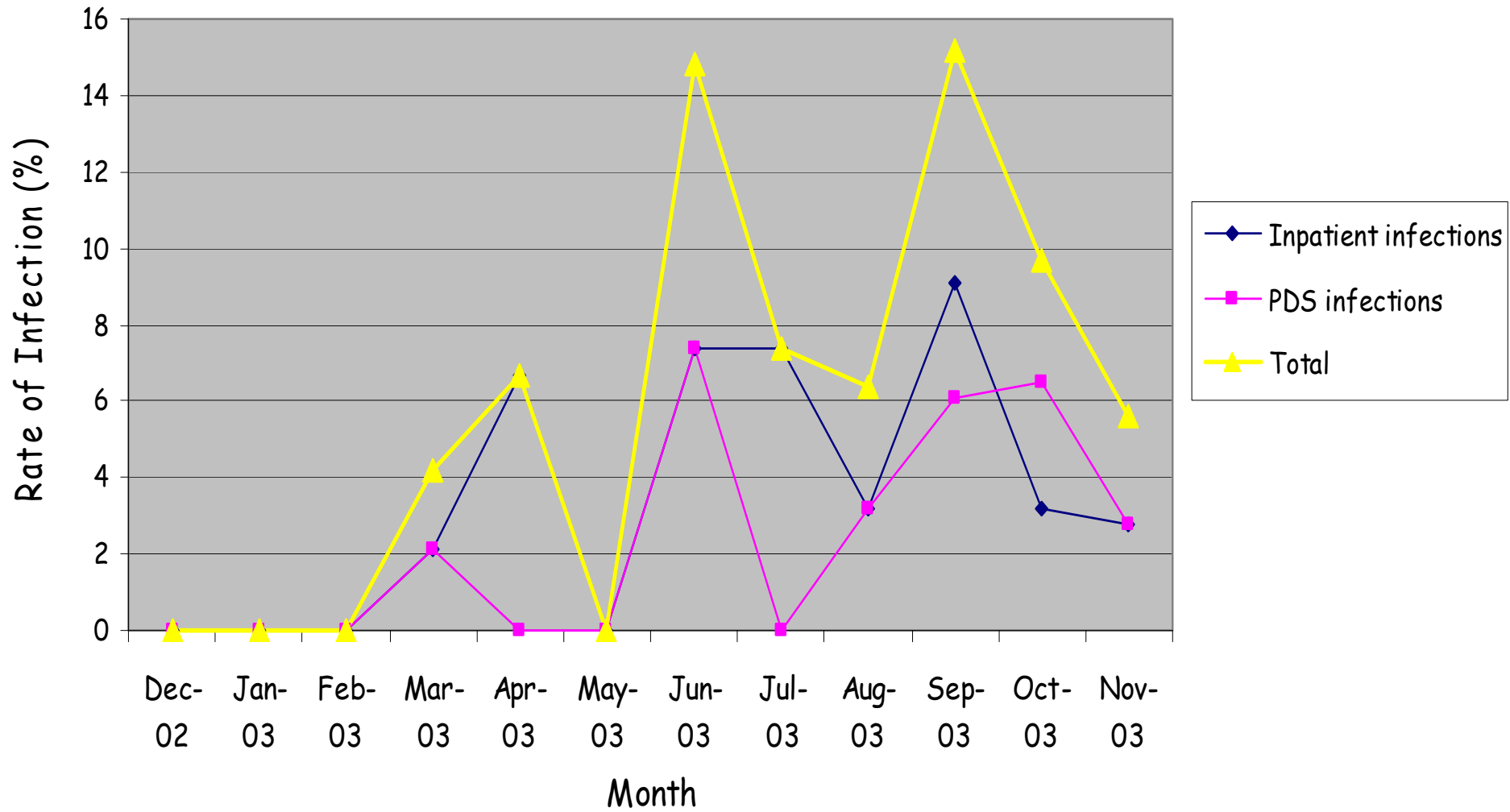
Jacqueline  
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# What is the aim of SSI surveillance?

- Standardised definition of a SSI
- Establish rates of SSI
- Systematic and ongoing
- Feedback of data
- Examine impact of any interventions

# Tayren Post Discharge and Inpatient Rates of SSI

## Dec 2002 - Nov 2003



# SSI surveillance in NHS Tayside



- Orthopaedics: THR, TKR, #NOF
- Caesarean section
- Breast cancer surgery
- Total Abdominal Hysterectomy (TAH)
- Vascular
- Ring fenced surveillance time

# Setting up Post Discharge Surveillance (PDS)



- Involve Clinicians and nurses
- Contact all GPs in Tayside
- Patient information leaflets
- Posters with stages of wound healing for hip & knee

# 30 day SSI (PDS)



- Readmission data for #NOF
- 13 & 30 day telephone surveillance for TKR & THR
- 30 day telephone surveillance breast, C-section & TAH
- Orthopaedic review of ?SSI

## Wound healing following a knee replacement

Following a knee replacement, patients may be in hospital for 3-7 days. Below are the stages of expected wound healing.

**DAY 2 POST-OP**



**DAY 4 POST-OP**



**DAY 7 POST-OP**



- Remarkably day 2 has minimal bruising and redness, sometimes there may be oozing of blood.
- Day 4 redness and bruising are becoming more evident.
- At day 7 the bruising is more visible.

The inflammatory phase is essential for tissue repair and occurs over the next couple of weeks. The immune system increases circulation to the wound, which produces redness and heat. Increased circulation also produces swelling and pain.

Swelling is normal in the first 3-6 months of surgery. Sometimes the whole leg can be swollen. Bruising may be worse than illustrated if the patient is on aspirin or warfarin.

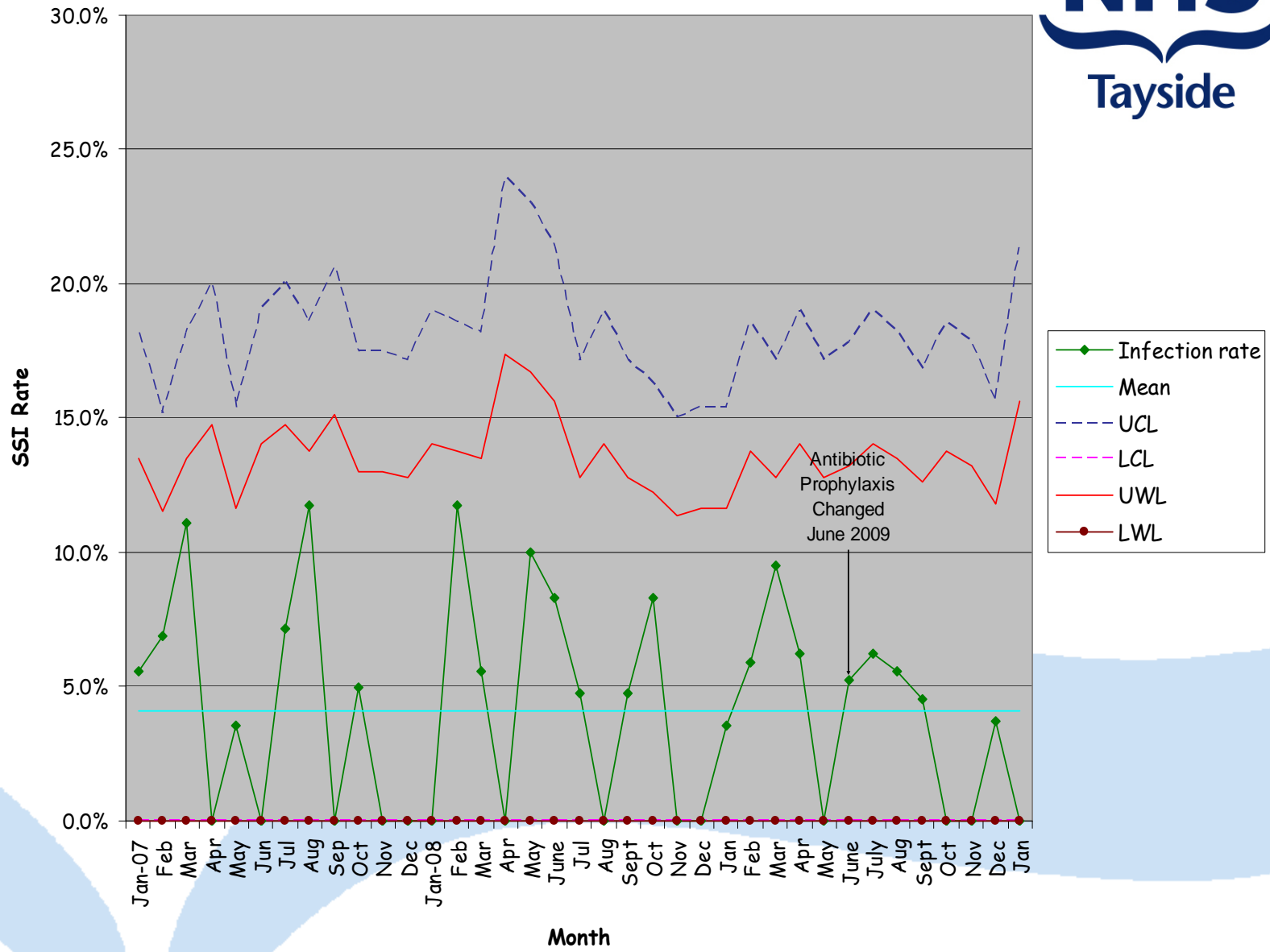
Exercise specific to the knee is essential to reduce swelling.

# Feedback of data

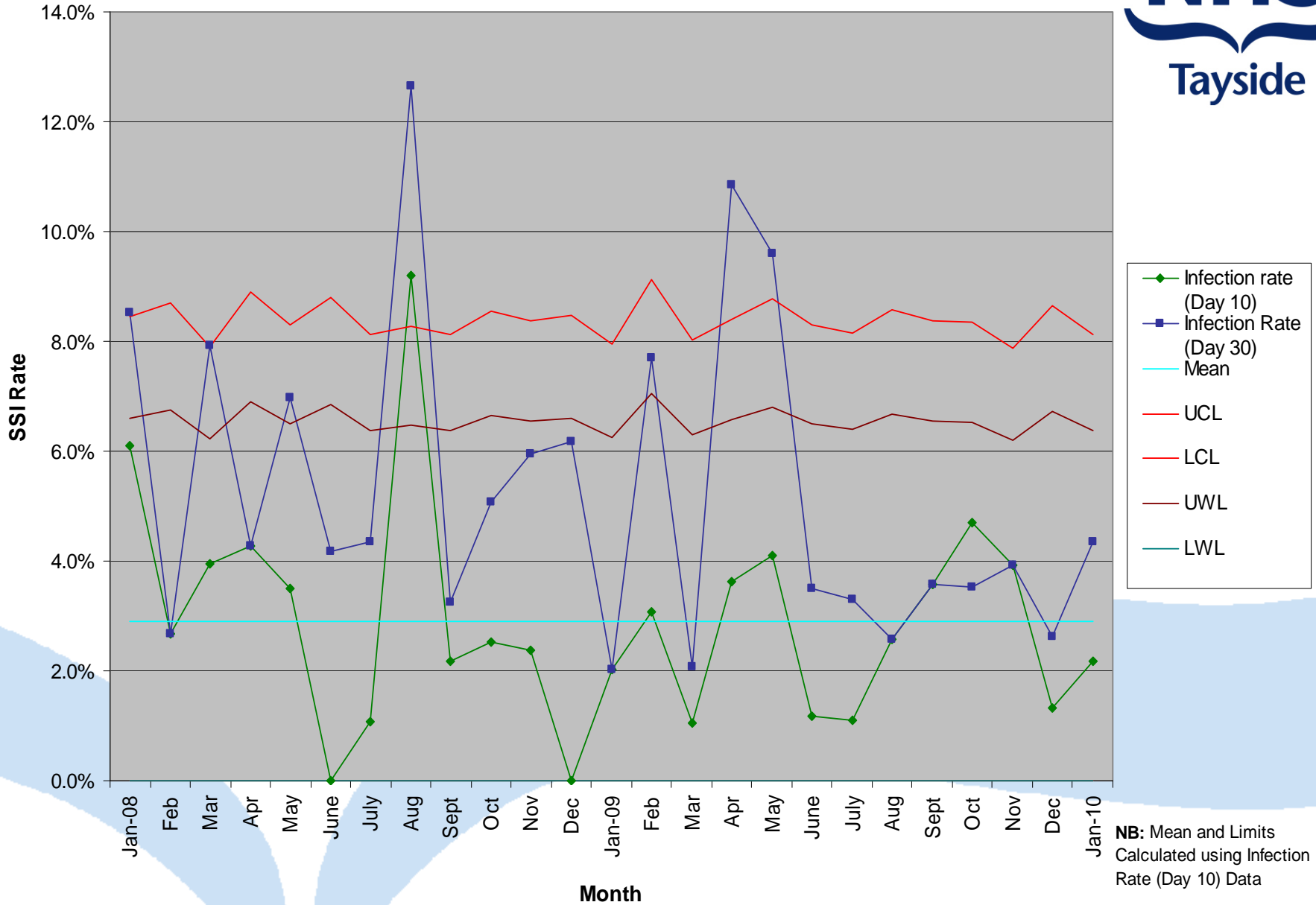


- SPC charts to clinicians & managers
- Clinical governance reports
- Case review for triggers
- Board reports: high level data & reports of incidents
- Staff access to data
- [www.nhstayside.scot.nhs.uk/](http://www.nhstayside.scot.nhs.uk/)

SPC Chart for SSI Rate (Superficial Infections) Jan 2007 - Jan 2010



# SPC Chart for SSI Rate Jan 2008 - Jan 2010



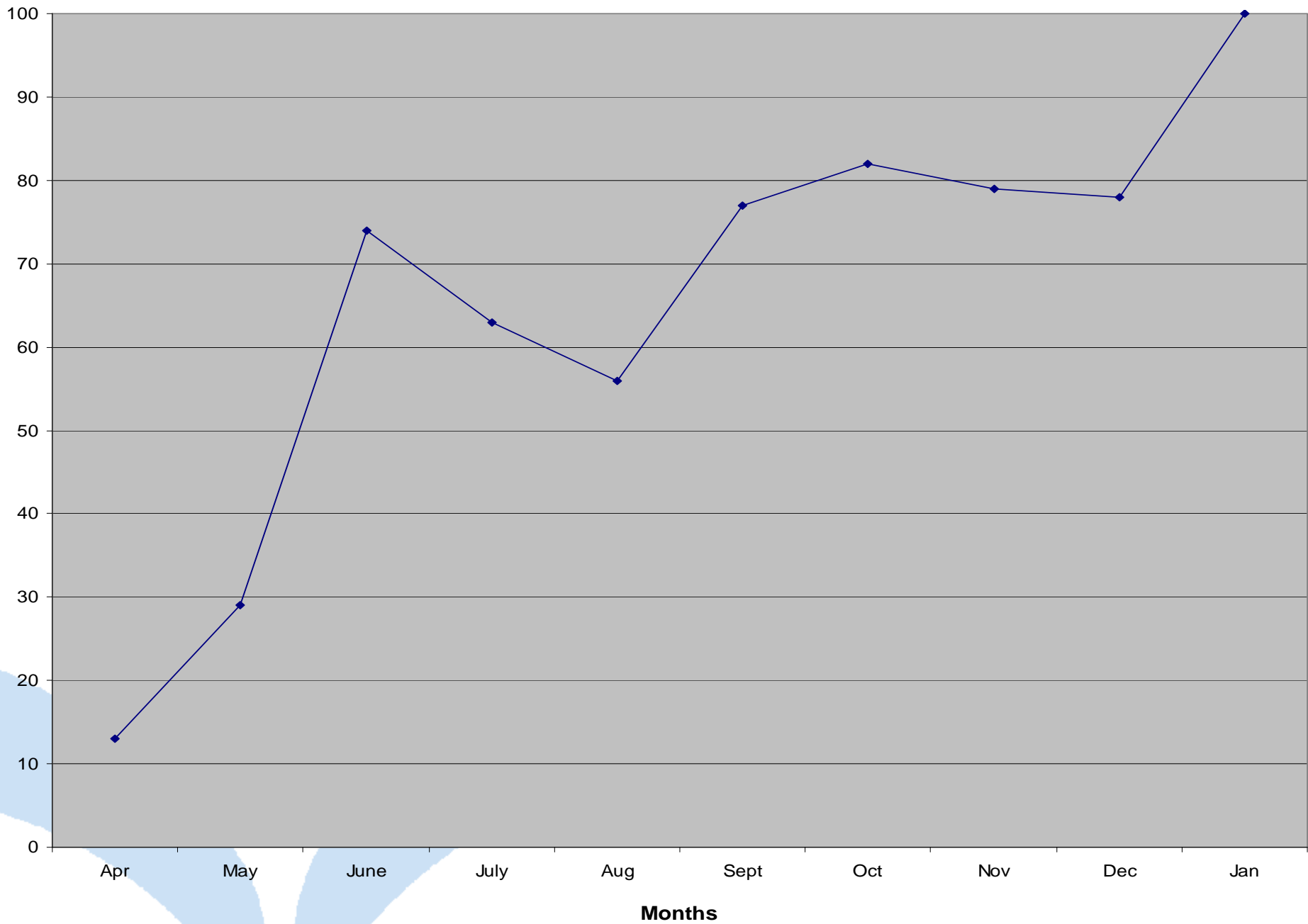
**NB:** Mean and Limits Calculated using Infection Rate (Day 10) Data

# Improvements & interventions

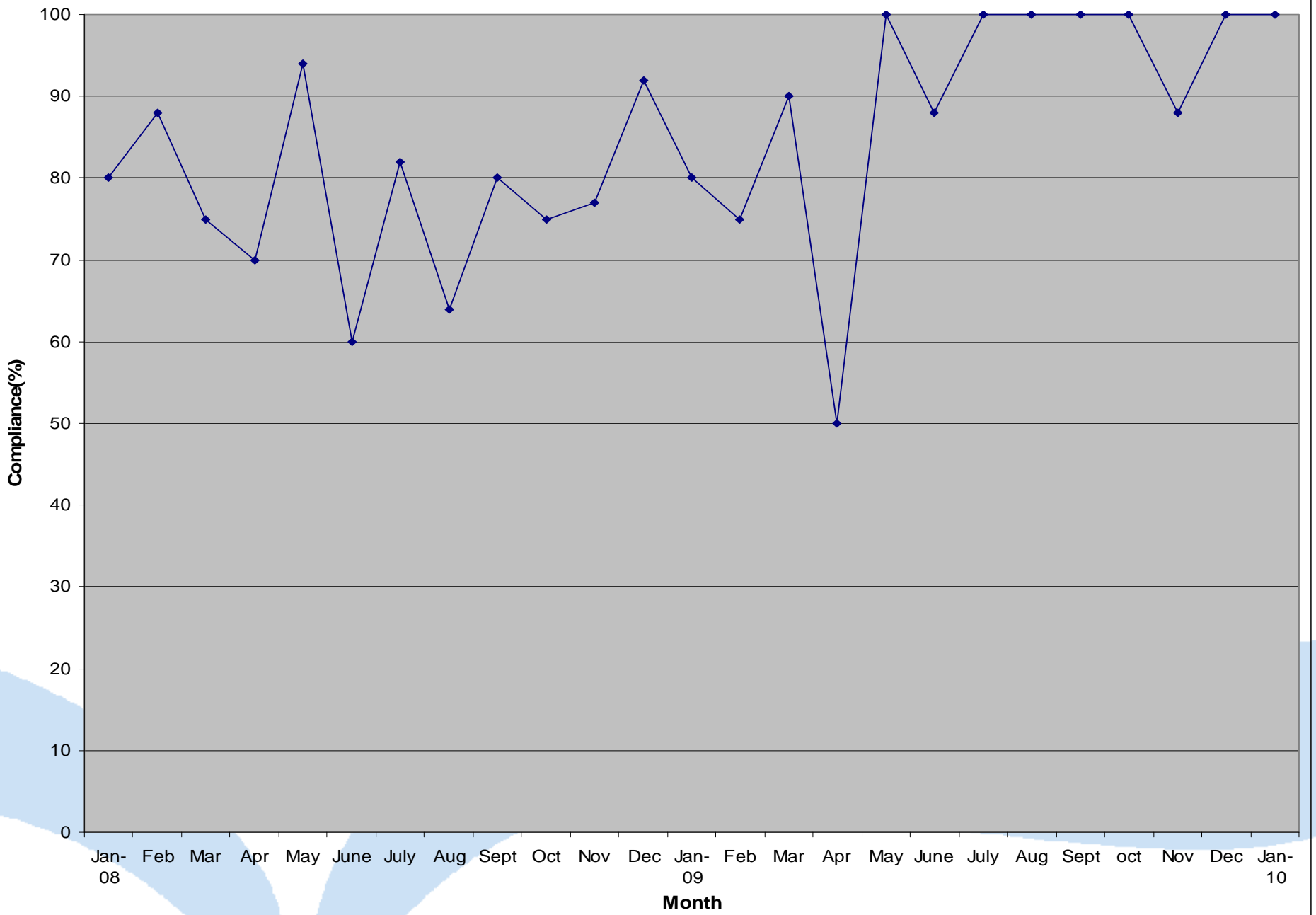


- Dressings
- Wound cleansing
- Improved infection control practices
- Standardised protocols
- Antibiotic administration, timing & documentation
- Recording of data e.g. ASA

**% of patients receiving Antibiotic Prophylaxis**



# Antibiotic Prophylaxis administered within 30 mins of knife to skin.

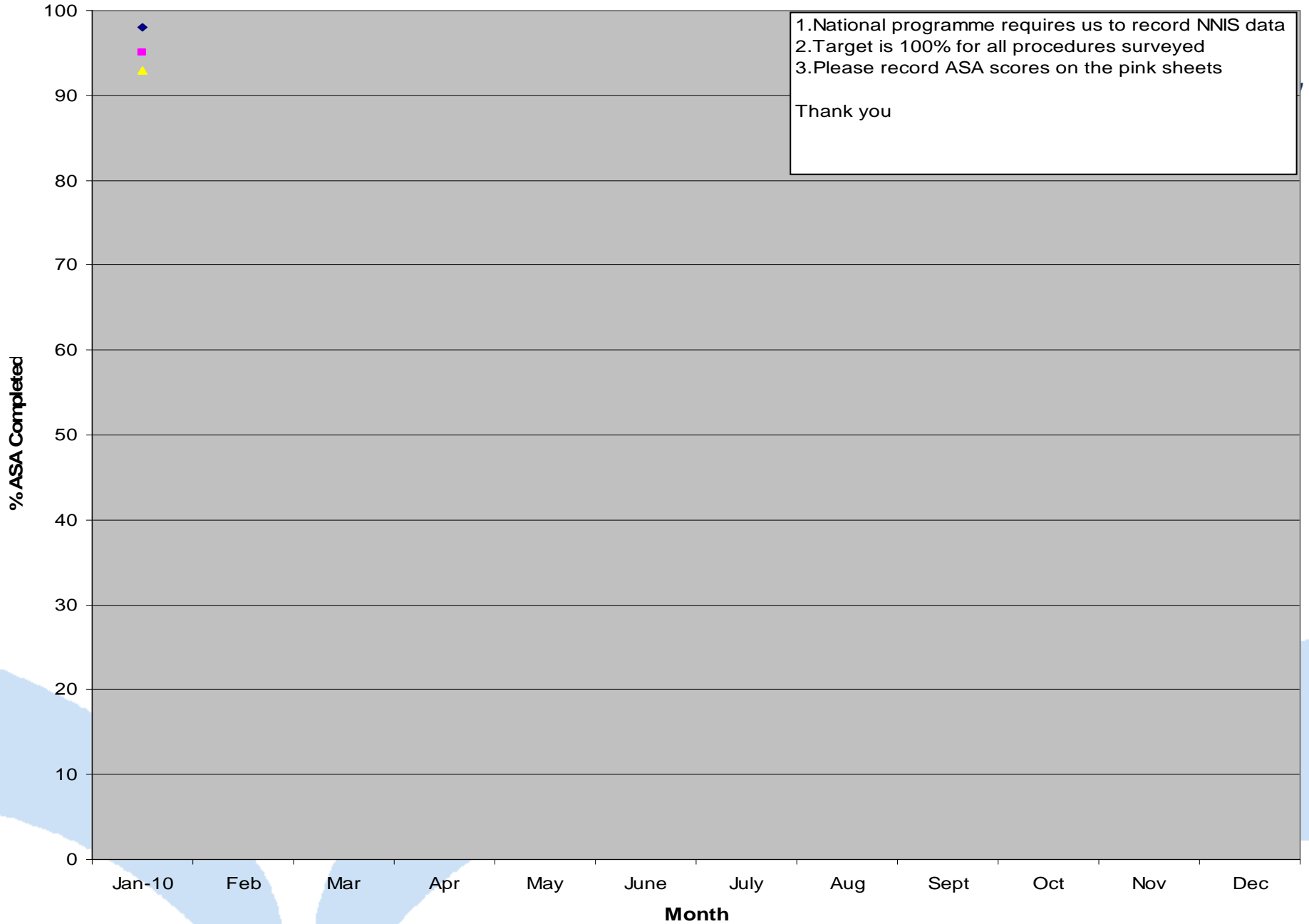


# Audit & Closing the loop



- Antibiotic prophylaxis compliance
- Antibiotic documentation
- ASA recording
- Audit use of dressings

# ASA recording



# Future actions



- Vertical audit
- SSI care bundles
- Patient education
- Improve data capture

**What next?**



**Reduce SSIs!**

