HEALTH QUALITY & SAFETY COMMISSION NEW ZEALAND

Kupu Taurangi Hauora o Aotearoa

Surgical Site Infection Improvement Programme meeting (7 April 2022)

Topic: SSI investigation tool quarterly reviews

SSII Surgical Site Infection Improvement Programme

Health Quality & Safety Commission New Zealand
Kupu Taurangi Hauora o Aotearoa

Opening karakia

E te huinga	For this gathering
Whāia te mātauranga, kia mārama	seek knowledge, for understanding
Unuhia te anipā,	draw out the anxiety
te nguha, kia mahea	and uncertainty, clear it away
Kia whai take ngā mahi katoa	have purpose in all that you do
Tū māia, tū kaha	stand tall, be strong
Aroha atu, aroha mai	let us show respect
Tātou i a tātou katoa	for each other.
Hui e tāiki e	It is complete

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Agenda

1300	Opening karakia Welcome	Nikki Grae
1305	Recap – SSI investigations	Amanda Wood
1310	SSI investigation – case study 1 • Review of the SSI investigation form and quarterly summary form • Key findings • Action points • Discussion	Amanda Wood Arthur Morris
1325	SSI investigation – case study 2 • Review of the SSI investigation form and quarterly summary form • Key findings • Action points • Discussion	Amanda Wood Arthur Morris
1140	CUSUM charts	Ruth Barratt
1350	Questions and comments Next meeting	Amanda Wood
1355	Closing karakia	Nikki Grae

Recap

- DHBs that have moved to light surveillance are required to use the SSI investigation tool to undertake a detailed review of orthopaedic SSIs, prioritising deep and organ space infections
- It is recommended that superficial SSIs that lead to readmission or further treatment are also investigated
- For those who have continued with full surveillance use of the SSI investigation tool is optional but encouraged

Recap

The investigation process addresses four basic questions:

1. What happened?
2. Why did it happen?
3. What are the contributing causal factors?
4. What can we do to prevent it from happening again?

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Quarterly summary reports

- Quarterly summary reports are to be submitted in April, July, October and January
- In the summary table list the SSIs that have been investigated using the tool, the key findings and the key action points
- Meetings to discuss the findings of these summary reports are held in April, July, October and January. These meetings provide an opportunity to monitor trends, discuss actions and quality improvement measures with peers
- Submit data on the SSIs that have been investigated in the three months prior to the meeting, eg, for July submit any infections investigated in April, May or June

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Website links

Light surveillance resource page	www.hqsc.govt.nz/our-work/infection-prevention-and-control/topics/healthcare-associated-infections/surgical-site-infections/light-surveillance/
SSI investigation tool resource page	www.hqsc.govt.nz/resources/resource-library/surgical-site-infection-ssi-investigation-tool/ SSI Investigation tool and summary forms at bottom of page
SSI investigation tool forms	SSI tool MS Word version www.hqsc.govt.nz/assets/Our-work/Infection-Prevention-Control/Publications-resources/SSI-tool-electronic-final.docx SSI tool printable PDF version www.hqsc.govt.nz/assets/Our-work/Infection-Prevention-Control/Publications-resources/SSI-tool-print-final.pdf

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Website links

SSIIP investigation form quarterly summary form	www.hqsc.govt.nz/assets/Our-work/Infection-Prevention-Control/Publications-resources/SSIIP-investigation-form-quarterly-summary_-2.xlsx
Using the SSI investigation tool practice points from Dr Morris	www.hqsc.govt.nz/resources/resource-library/using-the-health-quality-and-safety-commission-surgical-site-infection-investigation-tool-a-summary-of-practice-points-from-dr-arthur-morris-clinical-lead-health-quality-and-safety-commission/

Case study 1

70-year-old male - R) THJR

Date of admission: 15/11/2021

Date of surgery: 15/11/2021

Date of discharge: 18/11/2021

Readmitted 29/11/2021 for IV ABs and PICO dressing

Superficial SSI

Causative organism: *Staphylococcus aureus*

SAC rating 3

Risk factors/issues

- ASA score 3
- Age > 60
- Obesity: BMI 30–34.9
- Anti-staph bundle compliance unknown
- Blood loss 1600 ml
- Temperature intra-op unknown
- Patients discharge information did not include instructions on what to do if wound ooze occurred

Action points identified

- Anti-staph bundle checklist not completed
  - Education to staff at team meeting on the importance of this
  - Review of public hip and knee joint replacement patient files in February and March 2022 for completed anti-staph bundle checklists. Monthly feedback of results to ACNM
- To discuss at orthopaedic team meetings addition of ‘oozing’ in discharge advice (in list advising patient when they should seek medical attention)
- Theatre CNE has education programme planned for staff on importance of maintaining perioperative normothermia. Will include recording of temperatures

Quarterly report submission?

Procedure type	Type of infection	Key findings	Key action points
Hip	Superficial	Causative organisms *Staphylococcus aureus*, anti-staph bundle not recorded as being completed	Review of anti-staph bundle implementation, re-education to peri-op staff. Auditing (still ongoing) of implementation of Anti-staph bundle post staff education, with feedback given to peri-op staff

Case study 2

50-year-old male – L) TKJR
Date of admission: 13/12/2021
Date of surgery: 13/12/2021
Date of discharge: 15/12/2021
Date of readmission: 14/2/2022
Organ space SSI
Causative organism: *Staphylococcus aureus*
SAC rating 3

Risk factors/issues

- Obesity: BMI 30–34.9
- Anti-staph bundle compliance unknown
- Abnormal temperature in recovery – 35.8 degrees in recovery (warming device in situ)
- Unusual intra-op incident – 2 x attempts at spinal, clear CSF, BP drop 84/50, pt needed to be stabilised prior to KTS
- Prolonged duration of surgery – 111 mins
- Tourniquet start and end time not documented – unsure if tourniquet was on when IV ABs administered
- Excessive oozing post op – day 2 dressing soaked. Dressing changed on discharge

Action points identified

- Abnormal temperature between pre-op and recovery. Monitor any further SSI to see if there is a trend in abnormal temperatures
- Skin decolonisation compliance. Patients given chlorhexidine wash cloths at pre-admission appointment, but no documentation in patient notes to indicate the product was actually used. Review this process

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Quarterly summary submission

Procedure type	Type of infection	Key findings	Key action points
Knee	Organ space	1. Abnormal temperature between pre-operative and recovery 2. Skin decolonisation compliance	• Monitor any further SSI, to see if there is a trend in abnormal temps • Patients given chlorhexidine wash cloths at pre-admission appointment. But no documentation if they were actually used in notes. Review this process

What would you do with the findings?

- Engagement and communication of findings
  - Use findings as patient stories for learning and education
  - Review consumer engagement
- Gain an understanding of the current state – is this an outlier or is there a problem?
  - Do you just need to monitor first, prior to starting any action?
- If there is a problem, what is the problem we are trying to solve?
- If a process is not being completed, is the process best practice? Should it be implemented?
- What is the scope of any change required?
- How will you measure an improvement?

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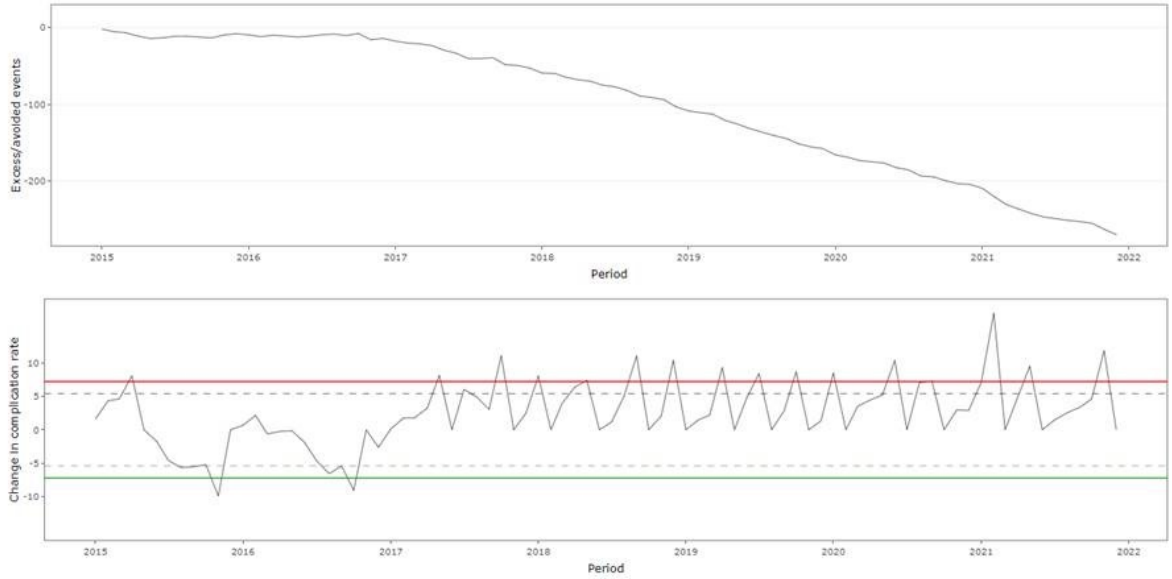
CUSUM and VLAD charts

Staphylococcus aureus bacteraemia

VLAD and CUSUM

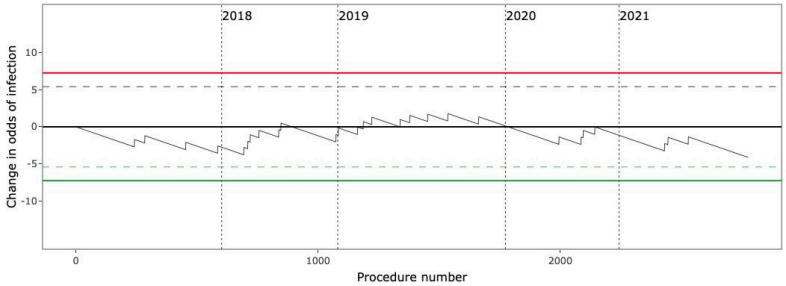


Alerts

SSI within normal limits

SSI Orthopaedic

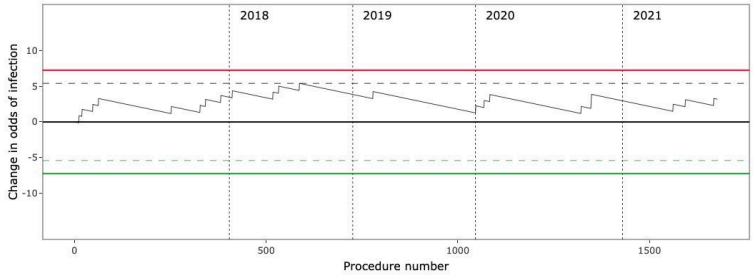
VLAD and CUSUM



SSI level warning

SSI Orthopaedic

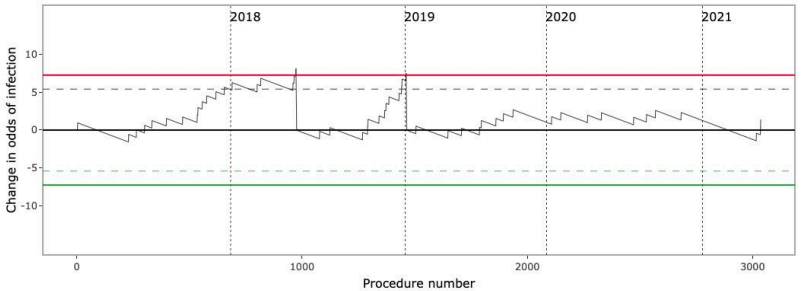
VLAD and CUSUM



SSI level alert

SSI Orthopaedic

VLAD and CUSUM



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Conclusion

- Questions? Comments?
- Next meeting mid-July 2022
- Survey www.surveymonkey.com/r/MW685SH

Request for SSI scenarios

Please submit scenarios for orthopaedic or cardiac SSIs that could be used for future training to:

SSIIP@hqsc.govt.nz

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Closing karakia

Kua mutu a tātou mahi
Ka tae te wā
mō te whakairi te kete
I te kete kōrero,
I te kete whakaaro
Hei tiki atu anō mā tatou
Tauwhirotia mai mātou katoa
Ō mātou hoa
Ō mātou whānau
Āio ki te Aorangi.
Hui e tāiki e.

Our work has finished
the time has arrived
to gather one's thoughts in the basket
that contains discussion
and concepts
that we may use it again in the future
protect us all
our colleagues
our families
peace to the universe.
it is complete.