



Mass Casualty Planning, Are You Ready?

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WHAT CONSTITUTES A MASS CASUALTY INCIDENT (MCI)



Defined:

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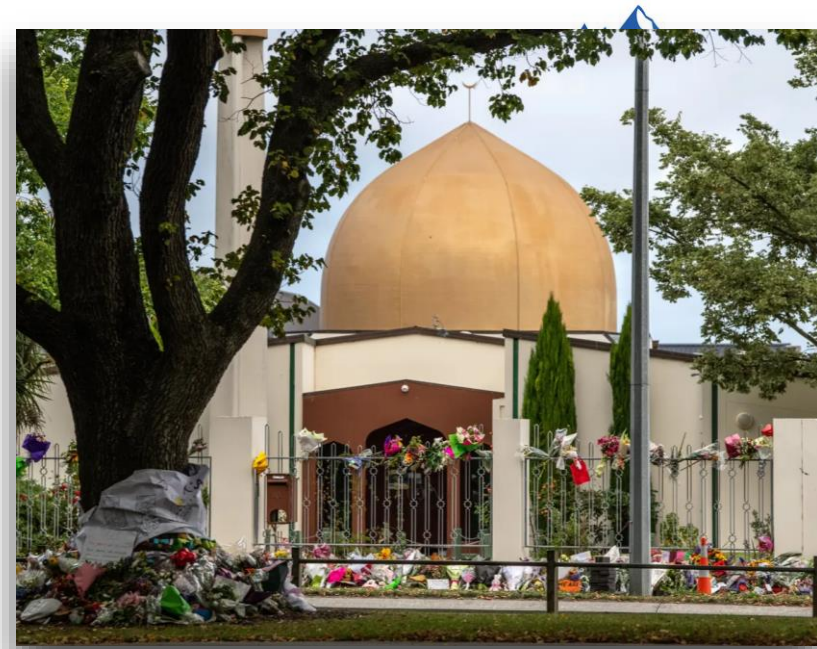


Defined:

An event, often with little to no warning, leading to the presentation of patients in sufficient numbers to exceed the resources available to provide conventional standards of care



Christchurch Earthquake



Al Noor Mosque



Whakaari Island



Cyclone Gabrielle

PREPAREDNESS

Taranaki Hospital & the ED Plans were out of date:

Hospital Emergency Response Plan (HERP): 2016-2019

ED Emergency Plan & MCI Plan (ED-DEP): 2017-2019

Prior Exercise:

ED MCI Simulations: March 2021

Taranaki Base Emergo Ex: Jul 2022



Taranaki Base Hospital

HOSPITAL EMERGENCY RESPONSE PLAN

2016-2019

WHERE TO BEGIN?

- Review existing local plans (HERP and ED-DEP)
- Review the Ministry of Health National Health Emergency Plan: Mass Casualty Action Plan (last published in 2011)
- Review learnings from our past MCI Simulation and Emergo Exercises
- Put together a great team

**National Health
Emergency Plan:**
Mass Casualty Action Plan

WHAT CONSTITUTES A MASS CASUALTY INCIDENT (MCI)

- MCI Triage
- MCI Treatment Zones
- MCI Leadership /Team Structure
- Patient Identification & Tracking
- Patient Flow
- Communications



MCI TRIAGE PRINCIPLES



- MCI triage deviates from standard triage in that triage decisions are based on the principle of providing care to the maximum number of patients with the best chance of survival.
- When a MCI is called, all patients are triaged using MCI triage principles:
 - All MCI patients
 - All non-MCI patients presenting to ED
 - All patients already in ED are re-triaged using MCI triage principles

MCI TRIAGE CATEGORIES



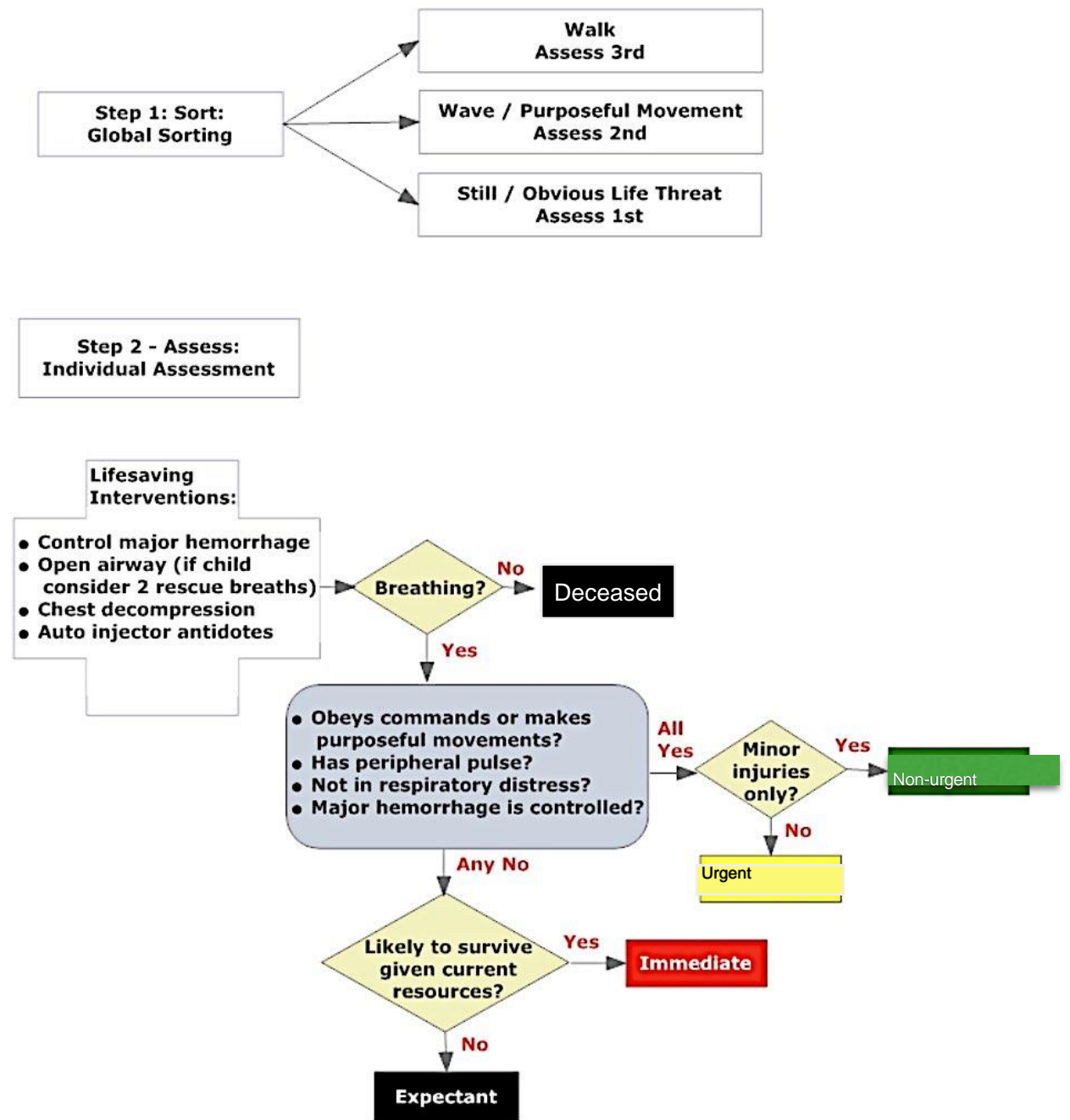
2023
istchurch



ID Colour	Patient Status	Description
Red	T1	Immediately life-threatening
Yellow	T2	Urgent, likely to be life-threatening
Green	T3	Non-urgent, ambulatory non-life-threatening
Black	T0 / T4	Deceased (not admitted to ED) / Expectant to die (admitted to ED)

SALT MCI TRIAGE FLOWCHART

- Sort
- Assess
- Lifesaving Interventions
- Treatment/Transport



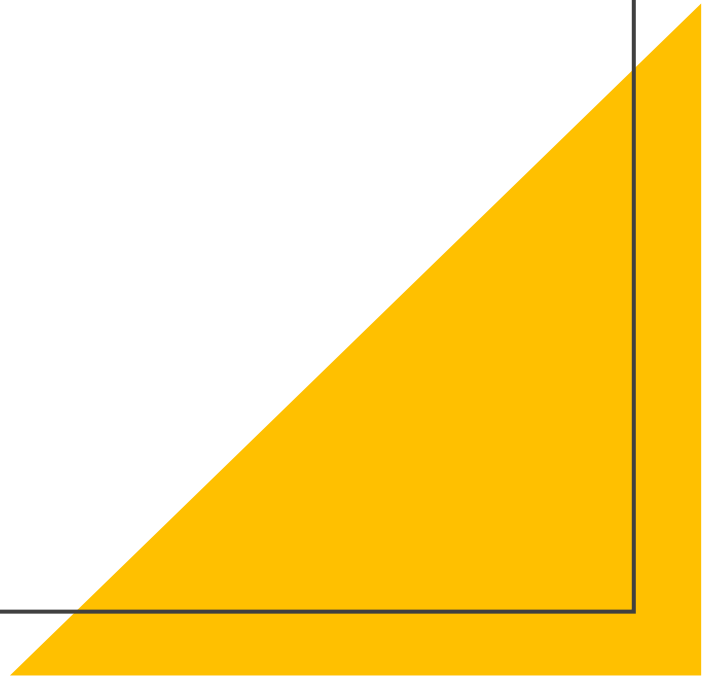
MCI LEADERSHIP STRUCTURE AND TEAM ORGANIZATION



- Event Operations Center (EOC) and Incident Management Team (IMT)
- ED Leadership Team
- Triage Team
- Treatment Zone Teams



ED LEADERSHIP TEAM





TRIAGE TEAM



TREATMENT ZONE TEAMS

- Zone Leaders
- Zone Coordinators
- Zone Treatment Teams

PATIENT FLOW



A large orange circle on the left side of the slide, partially cut off by the edge.

COMMUNICATIONS

The Irony:

In a time that we have never been more connected, communications continue to be one of the greatest hurdles in effective MCI response





MASS CASUALTY SIMULATION

- MAY THE FOURTH 2023
- Lead: Dr Christopher White, Emergency Department
Director of Medical Simulation

MCI SIMULATION OBJECTIVES



- Review challenges identified in our 2021 MCI simulation and how to improve
- Identify aspects of our preparedness to test during current MCI simulation
- Utilize new HERP and ED-DEP framework
- Hold a formal debrief session at the conclusion of the simulation
- Where possible compare performance between 2021 and 2023 simulations

WHAT WENT WELL- PLANNING



IMPROVED PREPARATION



IMPROVED FIDELITY



IMPROVED ENGAGEMENT



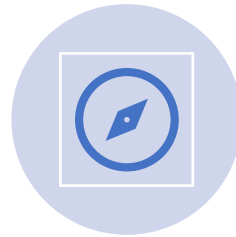
WHAT WENT WELL- EXERCISE



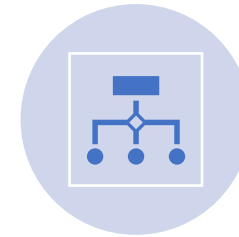
TREATMENT
ZONES



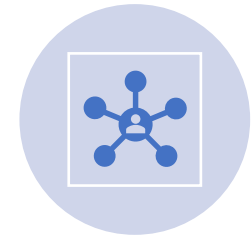
TREATMENT TEAM
FORMATION



TRIAGE PROCESS



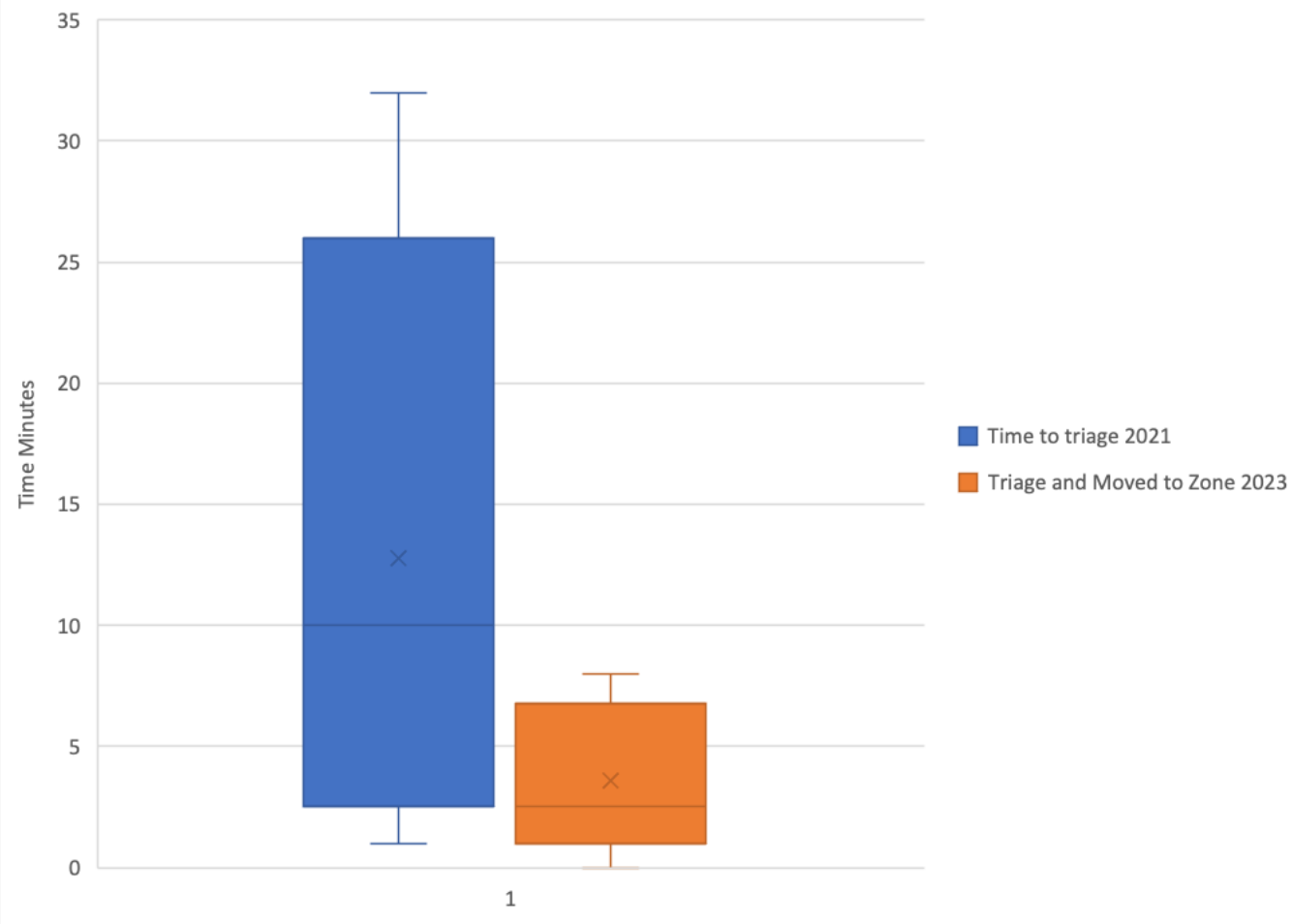
PATIENT FLOW &
TRACKING



COMMUNICATION



2021 Time to triage verses 2023 time to zone handover



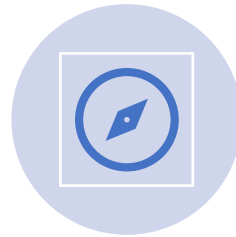
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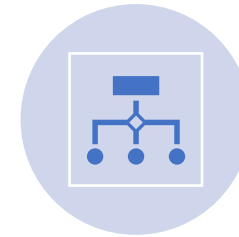
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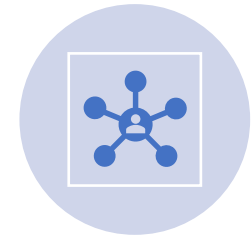
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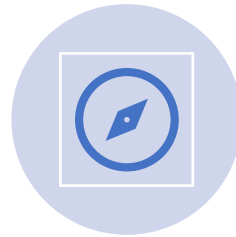
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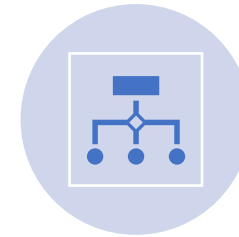
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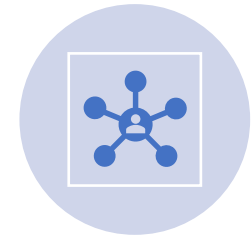
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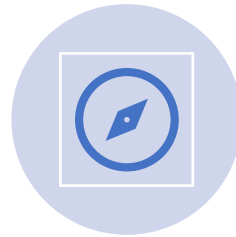
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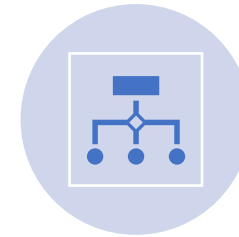
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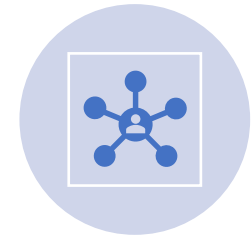
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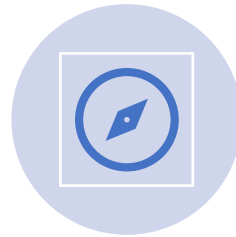
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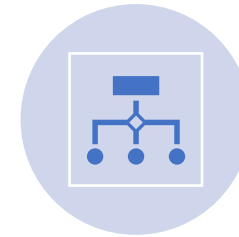
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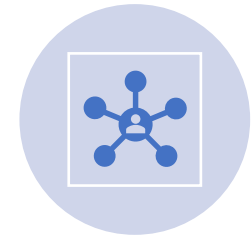
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COMMUNICATION





OUTCOMES

System safety and latent errors were discovered and fixed

Engagement improved with each successive exercise

Improved knowledge of where to report and respective roles



CONCLUSIONS

- “Practice makes Perfect” is not just a saying....

Tallach R, Schema B, Robinson M, et al. Refining mass casualty plans with simulation-based iterative learning. *British Journal of Anaesthesia*, 128 (2): e180-e189 (2022)

WHEN WILL IT BE OUR TURN?



Are you Ready...?

