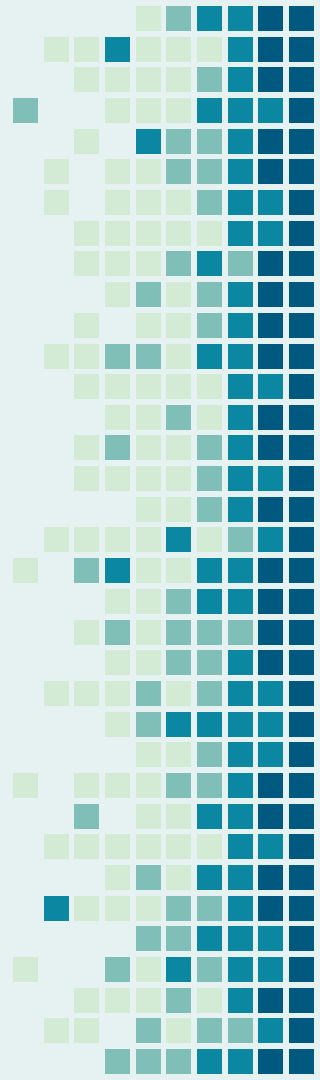


Mitigating Human Factors



Before proceeding to the solutions, first we will look at the most significant information to note from my Individual Essay.



1. Benefits of the web-based appointment and scheduling management information system (ASMIS) at the Queens Medical Centre:

- a) Facilitates the booking of appointments online,
- b) Range of advantages, including:
 - i. timely access to care for residents,
 - ii. the ability to accommodate the increasing population growth of the community, and
 - iii. a secure platform that is protected against cyberattacks.

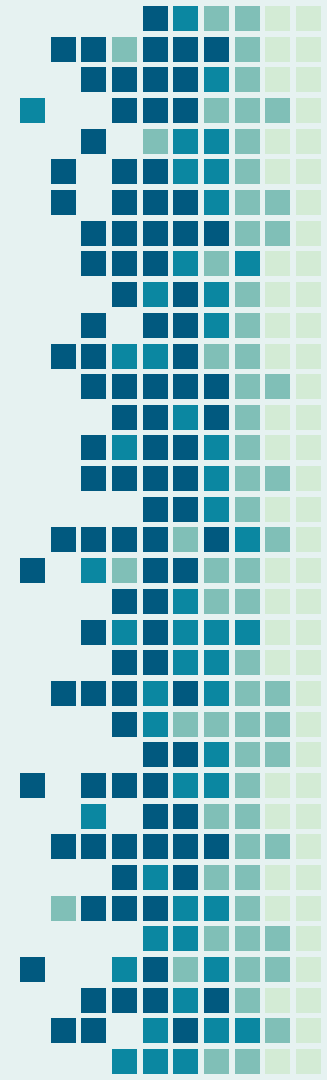
2. The concerns that the management of Queens Medical Centre have raised

The management specifically raised concerns about the lack of attention to human factors in ensuring optimal security.

3.The Human factors and their effects on cybersecurity.

To achieve optimal security, usability and functionality of ASMIS, human factors need to be prioritised.

**Based on the information noted above
(as from the individual essay), this
presentation will henceforth
concentrate on the strategies that can
be employed to mitigate the human
factors**





1. Mitigating Lack of Cybersecurity Awareness

Ways of mitigating this include:

a). Follow a cybersecurity and social engineering training and awareness programs (Aldawood & Skinner, 2019).

b). The use of interactive or fun way of learning or training users about cybersecurity.



c). The clinic to integrate and practice security culture by targeting the users and the organisation (Georgiadou, et al., 2022).

d). Staff and patients should be encouraged to report any suspicious activities and to be shown who to report it to.



e). The clinic should prioritize training budgets and regularly perform assessments and penetration tests



f). The clinic should advocate for institutions to teach on human factors that impact information security (Nobles, 2018).



g). The clinic should establish a cybersecurity incident response plan.





2. Mitigating Fatigue/Tiredness

There is a couple of ways this could be mitigated, and these are:

a). Better management practices
that promote more selfcare and stress-
free work environments.



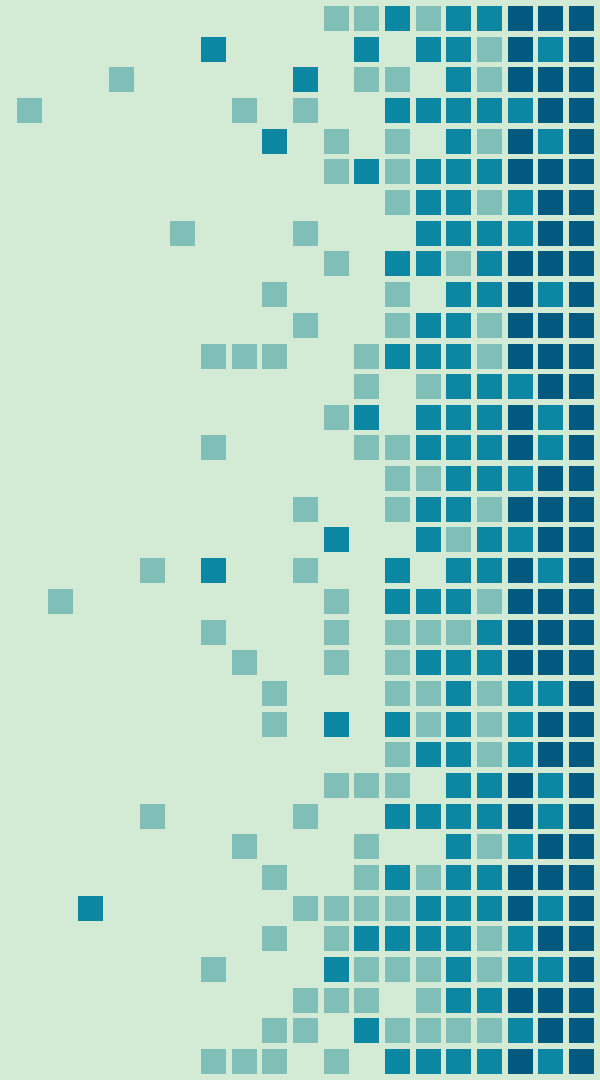
b). The clinic should consider integrating more ways of eviting over working from the employees (Nobles, 2018).



c). Implement features and automation tools (The CERT Insider Threat Team, 2013).

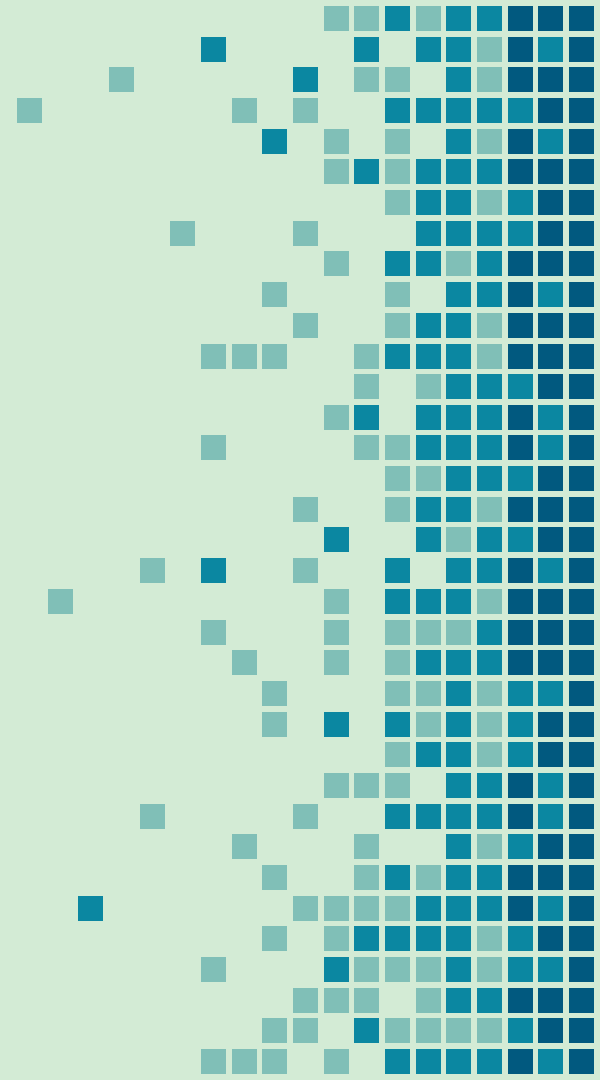


d). Implementing automated
security techniques



e). Implement security mechanisms like authentication can be designed to be triggered only when needed.(Sasse & Rashid, 2019).

f). Implement simplified security features to reduce user frustration,



g). Implementing Captchas that are accessible to all users(Sasse & Rashid, 2019).

h). Ensuring ASMIS follows a
secure software development process
and undergoes regular .



i). Adopting to password-less authentication. (Parmar, et al., 2022).





3. Mitigating Stress

Ways to mitigate this and ensure cybersecurity include:

a). Clear, easy and simplified user interface.



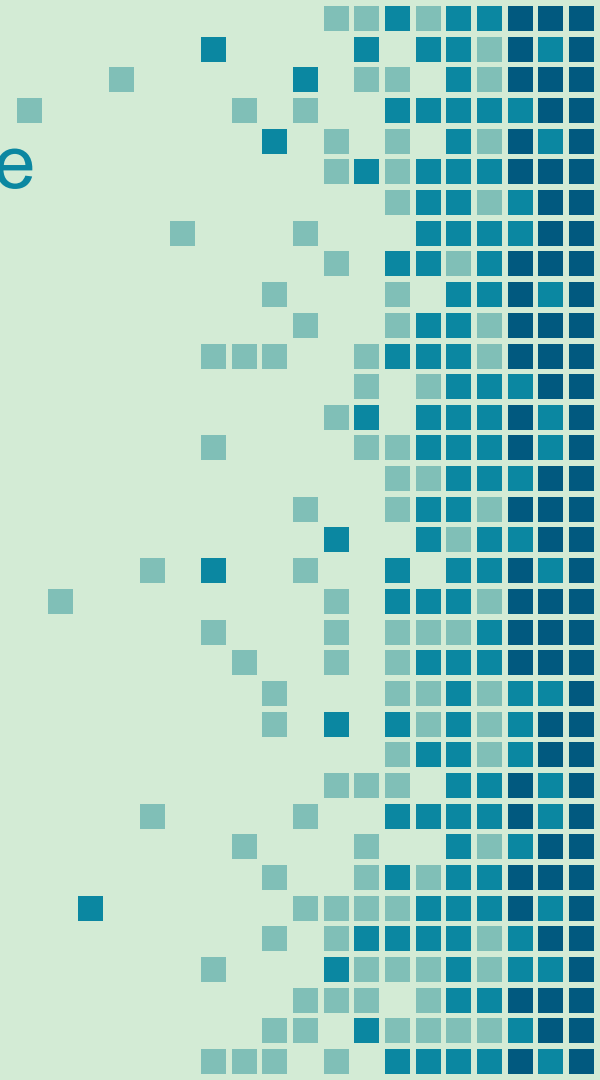
b). Implement user feedback and technical support and all reports and feedbacks should be addressed promptly.



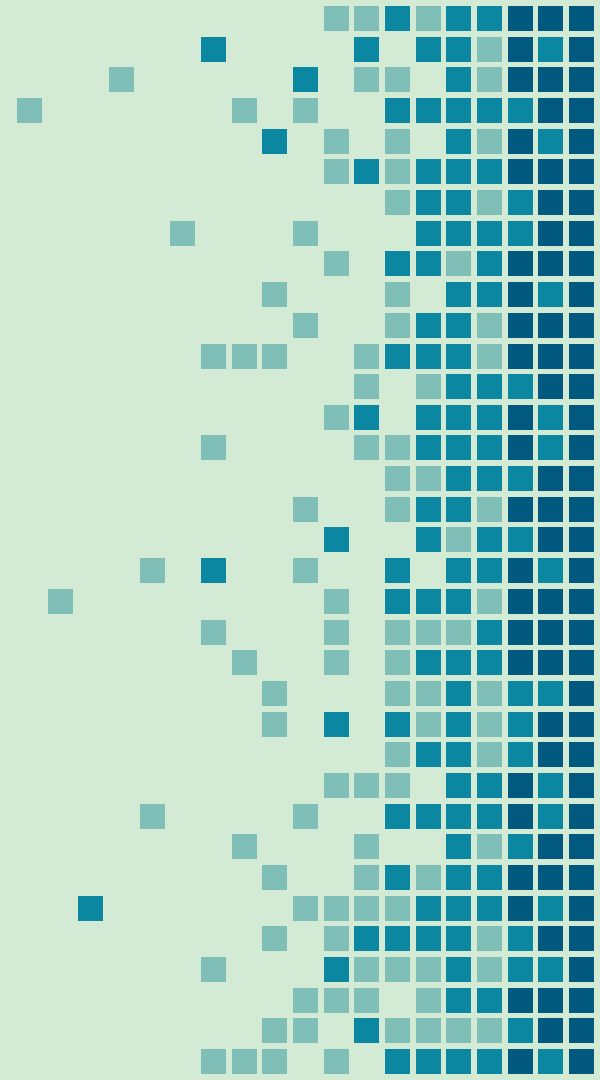
c). Ensure that ASMIS has fewer complex processes, errors and bugs by testing, patching and upgrading it regularly.



d). Encourage users to participate
in stress management training.

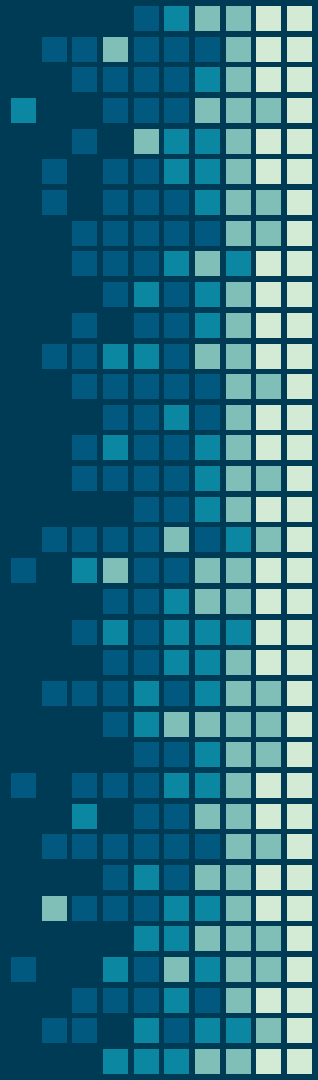


e). Creating a supportive and positive environment .

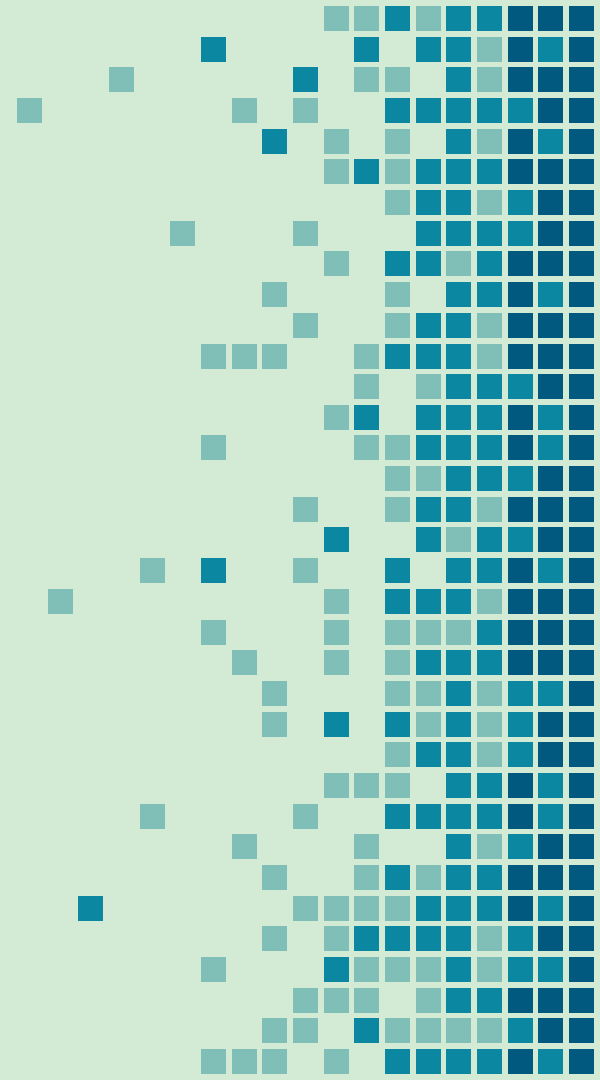




Social and Ethical considerations



a). Data transparency and communication.



b). The best data privacy and protection policies and regulations should be implemented and practiced.



c). Technologies such as
blockchain, Artificial Intelligence, etc,
can be used to combat human factor.



d). To consult human factors specialists and behavioural analysis, and to create an executive-led committee (Nobles, 2018).



In conclusion,

**To ensure optimal effectiveness,
efficiency, and safety of ASMIS, the
clinic must prioritize and manage the
human factors.**

37 The End, Thank You.

