**Article begins on page three of this document.**

**Title**

Environmentally sustainable health care: now is the time for action

**Authors:**

<table>
<thead>
<tr>
<th>Title</th>
<th>First name</th>
<th>Mid name</th>
<th>Last name</th>
<th>Position1</th>
<th>Address1</th>
<th>Position2</th>
<th>Address2</th>
<th>Tel</th>
<th>Email</th>
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<tbody>
<tr>
<td>1</td>
<td>Asso c. Prof.</td>
<td>Forbes</td>
<td>McGain</td>
<td>Consultant</td>
<td>1 A/Prof.</td>
<td>2</td>
<td></td>
<td></td>
<td><a href="mailto:forbes.mcgain@wh.org.au">forbes.mcgain@wh.org.au</a></td>
</tr>
<tr>
<td>2</td>
<td>Ms.</td>
<td>Meriel</td>
<td>Chamberlin</td>
<td></td>
<td>3</td>
<td></td>
<td>040400 6464</td>
<td></td>
<td><a href="mailto:meriel@fullcirclefibres.com">meriel@fullcirclefibres.com</a></td>
</tr>
<tr>
<td>3</td>
<td>Ms.</td>
<td>Jane</td>
<td>Milburn</td>
<td>sustainability consultant</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td><a href="mailto:jane@textilebeat.com">jane@textilebeat.com</a></td>
</tr>
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Number of corresponding author: 1

Number of alternative corresponding author: 0

**Addresses:**

<table>
<thead>
<tr>
<th>Institution</th>
<th>City</th>
<th>State</th>
<th>Post Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Western Health</td>
<td>Melbourne</td>
<td>VIC</td>
<td>3011</td>
</tr>
<tr>
<td>2 University of Melbourne</td>
<td>Melbourne</td>
<td>VIC</td>
<td>3010</td>
</tr>
<tr>
<td>3 Full Circle Fibres</td>
<td>Brisbane</td>
<td>QLD</td>
<td>4103</td>
</tr>
<tr>
<td>4 Textile Beat</td>
<td>Brisbane</td>
<td>QLD</td>
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Postal address of first corresponding author (if different from the institutional address given above)
Environmentally sustainable health care: now is the time for action

TO THE EDITOR: The MJA and Madden and colleagues\(^1\) display foresight and leadership in advocating for a transition to environmentally sustainable health care. The current coronavirus disease 2019 (COVID-19) pandemic exposes dual sustainability challenges: uncertain provision of personal protective equipment (PPE) in the face of a fractured global supply chain and burgeoning waste from single-use materials. Australia has an opportunity to respond to both challenges by accessing local capability and switching to reusable PPE as appropriate.

An apt place to begin is PPE gowns. Personal experience at an Australian hospital in March 2020 saw intensive care of one patient with COVID-19 requiring more than 50 single-use gowns during a 24-hour period. This quantum highlights the need to reconsider the source and composition of PPE materials. The National Health and Medical Research Council (NHMRC) guidelines\(^2\) state that gowns should be impervious to fluid, with no standards or levels applied. The oft-used system from the American Association for the Advancement of Medical Instrumentation (AAMI) grades gowns, single-use or reusable, within a range: level 1 being splash-resistant, and levels 2–4 being impervious to water columns placed upon them of 20, 50 and 100 cm respectively.\(^3\) Application of these levels is at the discretion of Australian health care providers, rather than mandated in the NHMRC guidelines. Fluid impervious level 2 provides an ample barrier to respiratory-borne pathogens. A transition to reusable level 2 gowns, when appropriate, provides an opportunity to reduce waste because they can be repeatedly sanitised by clinical laundry practice (detergent and > 60°C hot water). One reusable gown has been estimated to replace 50 disposable gowns.\(^4\)

By way of reducing reliance on distant supply chains, Australia currently has capacity to mill the fabric and manufacture reusable fluid impervious level 2 gowns today, and these gowns could be registered by the Therapeutic Goods Administration. Current experience suggests policy makers and clinicians are unaware of this possibility. The perception that single-use is the best choice indicates education is needed to assure clinicians that reusable gowns can provide at least equal protection for many clinical and intensive care unit tasks (severe acute respiratory syndrome coronavirus 2 [SARS-CoV-2] endures less on cloth than plastic).\(^5\) Activating local manufacture of reusable gowns would assure availability and potentially provide more environmentally and financially sustainable health care, while maintaining patient care and staff PPE supply.

Competing interests: No relevant disclosures.
Author details

Forbes McGain1,2
Meriel Chamberlin3
Jane Milburn4
1 Western Health, Melbourne, VIC.
2 University of Melbourne, Melbourne, VIC.
3 Full Circle Fibres, Brisbane, QLD.
4 Textile Beat, Brisbane, QLD.

forbes.mcgain@wh.org.au

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References

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Author/s:
McGain, F; Chamberlin, M; Milburn, J

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