

Article details: 2018-0064	
Title	<b>Reducing unnecessary urine culturing and antibiotic overprescribing in long-term care: outcomes of an implementation science informed before and after analysis</b>
Authors	Kevin Antoine Brown PhD, Andrea Chambers PhD, Sam MacFarlane RN, Bradley Langford PharmD, Valerie Leung, Jacquelyn Quirk MPH, Kevin L. Schwartz MD MSc, Gary Garber MD
Authors' comments to reviewers	We believe we have comprehensively addressed the editorial team and the reviewer comments. Once again, thanks for considering our manuscript.
Reviewer 1	Karenn Chan
Institution	University of Alberta Faculty of Medicine and Dentistry, Family Medicine
Reviewer comments	<p>Very interesting and relevant study. The findings could be relatively easily implemented. Good analysis of limitations (exactly what I was thinking as I read through the paper).</p> <p>Just a few thoughts for improvement:</p> <ol style="list-style-type: none"> <li>1. I think it would be helpful to have clarification as to the background of the healthcare staff that were typically named champions? RNs? LPNs?</li> </ol> <p>We have added more detail to the methods section regarding the staff involved at the healthcare facilities: "The teams included the director of care or associate director of care with additional members varying across facilities (i.e., nurse practitioners, physicians, nurses, staff involved in quality improvement initiatives)."</p> <ol style="list-style-type: none"> <li>2. I find Figure 2 a bit confusing. There is no label on the x axis and it took me a minute of so to realize the axis was year/month. Perhaps a label would be helpful? Also, I would like to see this figure perhaps have some indication of when the baseline, implementation and intervention periods were over time.</li> </ol> <p>We have added more detailed axis labels and axis titles, and have added the timing of the baseline implementation and intervention periods to the graphs. Please see the revised figure.</p> <ol style="list-style-type: none"> <li>3. From the paper it wasn't clear to me whether or not each 10 of the LTCH included in the study actually reached your power threshold measure of 10 months of follow up.</li> </ol> <p>As described in Table 3, we had an average of 7.0 months of follow up per facility in the baseline period, and 5.2 months of follow-up per facility in the intervention period. While every facility had at least 5 months of baseline follow-up, it's true that not all facilities had 5 months of intervention follow up. We don't think this strongly impacted the observed power of the study since, on average, we had more facility-months of follow-up than anticipated by the power analysis.</p>
Reviewer 2	Jimmy Pham
Institution	Midwestern University, Arizona College of Osteopathic Medicine
Reviewer comments	<p>Thank you for the opportunity to review this manuscript. Please see the following comments</p> <ol style="list-style-type: none"> <li>1. The captions/legends for each table/figures are well described.</li> </ol> <p>Thank you.</p> <ol style="list-style-type: none"> <li>2. The limitations were discussed thoroughly.</li> </ol> <p>Thank you.</p> <ol style="list-style-type: none"> <li>3. Any confounding factors can be foreseen besides the different formats used by the pharmacy?</li> </ol> <p>Potential secular trends.</p> <ol style="list-style-type: none"> <li>4. What were the criteria for choosing each LTCH, if any?</li> </ol> <p>We have added more detail to the methods section regarding the recruitment of homes. "Public Health Ontario staff identified an initial list of homes that had previously expressed interest in making</p>

	improvements to their practices in this area and that would provide variation by region, size and ownership type. A stakeholder relations database is routinely used at Public Health Ontario to document all communications including requests for education. This database was used to retrieve names of 15 homes located in four different regions of Ontario who had previously expressed interest in this topic. To be eligible to participate, the home had to identify at least 3 staff healthcare providers to participate on an implementation team and be able to provide monthly lab and pharmacy reports.”
Reviewer 3	Kiley, Lacelle,
Institution	Ottawa Hospital Research Institute
Reviewer comments	Well written and excellent to hear progress on this issue.  Thank you.