

**EDITORIAL**

# Telehealth in practice: using Normalisation Process Theory to bridge the translational gap

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Telehealth is increasingly seen as one strategy for counteracting the challenges of providing health care to populations who are now living longer with chronic diseases and for improving access for those living in geographically dispersed locations.<sup>1</sup> Despite the obvious potential of telehealth and a plethora of pilot and demonstration projects of varying size, there still remain relatively few well established services in routine practice.<sup>2</sup> A key problem has been that of integrating telehealth into professionals' patterns of work. In this issue of the *PCRJ*, Godden and King<sup>3</sup> acknowledge that the potential of telehealth can be limited by a failure of the intervention to integrate into standard clinical practice. Consequently they sought to establish the distribution of potential patients and the willingness of care providers to adopt telehealth interventions as a prerequisite to considering the implementation of such an intervention.

The importance of such an approach has been emphasised in the updated MRC guidelines on developing and evaluating complex interventions.<sup>4</sup> The use of theory when considering implementability is recommended to enhance the transfer of research findings into clinical practice.<sup>5</sup> One such theory is Normalisation Process Theory (NPT), described as being "concerned with the social organisation of the work (implementation) of making practices routine elements of everyday life (embedding) and of sustaining embedded practices in their social contexts (integration)" – which was developed in response to the evidence that this implementation, embedding and integration rarely happens in practice.<sup>6,7</sup>

NPT grew originally from the Normalisation Process Model (NPM),<sup>8</sup> utilised by Godden and King in their paper.<sup>3</sup> NPM proposes that complex interventions are implemented through processes where the collective action and interactions of patients, professionals and others are governed by four constructs: interactional workability (the ways in which telehealth helps or hinders professionals in performing various aspects of their work); relational integration (professionals' confidence in the safety or security of telehealth); skill set workability (how workload and training requirements are affected); and contextual integration (issues of resource allocation, infrastructure and policy).<sup>9</sup> Focussing on these constructs and utilising NPM is appropriate when examining how telehealth is put into operation in practice.<sup>10</sup>

NPM does not, however, explain how interventions are formed in ways that are sustained, how actors are enrolled into them, or how new interventions are appraised. May and Finch collaborated to extend the model to a middle range theory (NPT)<sup>6</sup> by exploring new domains of coherence (the work of making a complex intervention hold together and cohere to its context), cognitive participation (the work of engaging and legitimising a complex intervention) and reflexive monitoring (the work of understanding and evaluating a complex intervention in practice). Within this extended model, 'collective action' represents NPM and is just one of four constructs or types of 'work' which can be characterised when considering the evaluation and implementation of interventions.<sup>6,7,11</sup>

These constructs are applicable regardless of whether its use is at the stage of developing a complex intervention, optimising trial parameters, or the actual implementation of complex interventions.<sup>12</sup> Therefore, NPT provides a straightforward conceptual framework – whose accessibility has been improved through translation into a web-based toolkit<sup>13</sup> – to help clinicians, researchers and managers describe and (importantly) to judge the implementation potential of an intervention, either allowing for improvement and development prior to

implementation, or if required an acceptance that the intervention simply lacks implementability and that further work is not warranted.<sup>12</sup> In this latter role, NPT can be seen as a potential “Trial Killer”; it might be used to determine whether trials of complex interventions should proceed or not, depending on whether it seems likely they could become part of routine practice.<sup>12</sup> There are further examples of its use in other disease areas, telehealth,<sup>14,15</sup> and also in novel applications such as characterising the ‘work’ that patients themselves have to do when managing chronic illnesses such as heart failure.<sup>16</sup>

Using NPM to assess implementability, as Godden & King have done, is valuable. It identifies potential problems for professionals wanting to incorporate telehealth into their everyday work. NPM, and particularly NPT, may help us bridge the translational gap by identifying possible barriers to the implementation of new services, thereby allowing implementers to focus efforts on addressing areas likely to be particularly problematic. But it should be noted that NPT is about “workability in practice” – and the way people perceive whether something might or might not work in practice can change when services are being used regularly.<sup>17,18</sup> Views on interactional workability and relational integration issues can change with use; for example, users might lose confidence in a system and score it poorly for relational integration if there are persistent technical or reliability problems.<sup>19</sup> Therefore, implementers should use NPT in an iterative way when implementing services, with preliminary work – as described by Godden & King<sup>3</sup> – serving to sensitise implementers to potential problems. However, they need to be aware of difficulties in other areas that might arise following the real-life use of systems.

### Conflicts of interest

Professor Mair has contributed through funded grants from the ESRC/SDO NIHR and elsewhere to the development and dissemination of Normalization Process Theory, including the Normalization Process Theory Toolkit mentioned in this editorial. Dr Morrison has no conflicts of interest.

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