

# **Key Elements to Include in a Coordinated Care Plan**

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## Key Elements to Include in a Coordinated Care Plan

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*“It’s simple but revolutionary to think of individual medical care in the context of a plan, with specific goals and tracking mechanisms. The healthcare experience changes fundamentally, particularly for a person with complex challenges ... if all members of the care team are engaged in the success of that plan.”<sup>1</sup>*

For several years now Ontario has been working towards an integrated system of health care. However, providing integrated care is not a simple undertaking. The World Health Organization notes that “There are more examples of policies in favour of integrated services than examples of actual implementation.”<sup>2</sup> Even Sweden, the country recently ranked first in an annual review of global health statistics by the Organization for Economic Cooperation and Development (the OECD), has been instructed that it’s “need to achieve greater co-ordination between health care services is of paramount importance to assure the quality of care of an ageing population.”<sup>3</sup>

Many areas of the world including Ontario are predicting significant increases in their senior’s populations, and as a result, an increasing number of individuals with multiple, complex and chronic health conditions. According to the Ontario Ministry of Finance, the number of seniors aged 65 and over is expected to more than double from about 2.0 million or 14.6% of the population in 2012 to almost 4.2 million or 24.0% by 2036.<sup>4</sup>

Ensuring that Ontario’s health care system provides continuity of care for this population and other individuals with complex conditions will become increasingly important. Coordinated care plans can be an important tool for physicians and patients to manage numerous medical therapies from various health professionals within the patient’s circle of care. Without a strong communication link between care providers, negative consequences such as poor health outcomes, errors in treatment, increased readmissions to hospitals, wasted resources, and dissatisfied patients may result.<sup>5</sup> In addition, communication with patients is necessary to support appropriate self-care.

Currently there are several different care planning models being used across Ontario with varying degrees of success. At the same time, the Ontario government is providing funding to the almost

fifty Ontario Health Links to create coordinated health care plans for their patients with complex health issues. A draft Health Link coordinated care plan template is attached in Appendix 1 for information. The purpose of this paper is to provide research and information about key elements that are common to care plans from various national and international jurisdictions. Its focus is care plan content rather than addressing the complex issues related to the implementation of a coordinated care planning system, although the paper will highlight some of the challenges related to implementation.

### **What is A Coordinated Care Plan?**

A coordinated care plan is a written or electronic plan that is created and maintained by the patient or his or her family, the health care team including physician consultants where appropriate, and when necessary, community services. It is designed to assist the patient with their daily health care requirements. It outlines the patient's short and long-term needs, recovery goals, and coordination requirements, and it identifies who is responsible for each part of the plan (e.g. the physician, care team, patient, etc.).<sup>6</sup>

As well, the coordinated care plan is a tool to facilitate communication between the parties involved in patient care. They can be used to help physicians and patients manage numerous medical therapies prescribed by various health professionals within the patient's circle of care. The Mental Health Commission of Canada describes care plans as a "crucial part of supporting and helping the process of recovery. They should not be distinct from the daily provision of care. They are a key mechanism by which a person's individual care and treatment can be developed, documented and shared with all those who are involved."<sup>7</sup>

Perhaps one of the most important aspects of a coordinated care plan is that it involves engaging the patient in the planning process, facilitating "patient self-management where patients set their own goals and build upon their successes."<sup>8</sup> This often improves the overall compliance of the patient to follow the plan and can lead to a more successful recovery. Patient centered treatment, meaning "treating patients as partners, involving them in planning their health care and

encouraging them to take responsibility for their own health” increases patient adherence and satisfaction with the care received.<sup>9</sup>

### **Key Elements of a Coordinated Care Plan**

What follows is not an exhaustive list of key elements be included in a coordinated care plan, but rather a compilation of common elements identified in care plans across several jurisdictions where care planning is customary, including Ontario, British Columbia, Nova Scotia, Ireland, Scotland, the United Kingdom, the Netherlands, Sweden, Australia, and the United States. The elements highlighted below are to serve only as a framework that can then be customized to meet the needs of the LINKS or any other health-related bodies involved in coordinated care planning.

#### **1. Patient Information and Medical Summary**

It is important for this section of the care plan to contain accurate and up-to-date information about the patient as it may be used by several health care or community professionals or as a quick reference in the event of a medical emergency. As well, up-to-date contact and medical information will facilitate the ease of information sharing from one level of health or community care to another. The idea is for the information to be brief and concise as this is only a summary. More detailed information regarding medical conditions, treatments, and therapies can be provided later in the care plan.

Specific information that could be included in the patient information and medical summary may include:

- The contact information for the person who is preparing the care plan
- Patient demographics (name, age, address, phone number, e-mail, normal weight, temperature, blood pressure, and pulse, and cultural, ethnic or religious beliefs, etc.)
- Family and/or care giver contact information (including substitute decision-maker)
- Contact information for primary physician, medical specialists, community providers or agencies (e.g., home care worker or the senior’s centre where the patient currently resides)
- An indication of whether there is an advanced care plan in place
- Allergies and medications

- Principal diagnosis and active problem list
- Past health history (a summary) including hospitalizations
- Current therapies.<sup>10,11</sup>

As well, many organizations include a form or template in the care plan to note the medications a patient is taking, stating what is being taken and why, when the medications are taken, and how they are administered so that negative drug interactions can be avoided.

Toronto's Sunnybrook Hospital has an innovative program for care planning called MyChart, an online website where patients can create and manage their personal health information. Through MyChart, patients can enter their personal and family health details (including allergies and current medications), make online appointment requests, maintain a personal address book of physicians, care givers, clinics, etc., keep a personal diary regarding their illness(es), view test results, like laboratory reports, CT and MRI reports which are gathered from Sunnybrook's Electronic Patient Record (EPR) system, and find links to relevant disease-specific information and personalized health information, for example, frequently asked questions about certain procedures.<sup>12</sup>

Perhaps most interesting is that while MyChart is currently only available to Sunnybrook patients, they can electronically grant access to family caregivers, hospital clinicians, primary care physicians, Community Care Access Centres, and pharmacists. Users access the internet, then go to [www.mychart.ca](http://www.mychart.ca) and log in using the access information given to them by the patient.

Additional information regarding this program can be found at <http://sunnybrook.ca/content/?page=mychartlogin-learnmore>.<sup>13</sup>

The Hospital for Sick Children has an interesting program called MyHealth Passport. Patients are provided with much of the information noted above in a wallet-sized document that is customizable electronically on the hospital's website through the use of templates for 39 different health conditions. Additional templates for other conditions can be created by the hospital upon patient request. The initial "passport document" is created by the patient and their physician. One

of the purposes of the program is to encourage “pediatric patients to gain ownership of their health information”<sup>14</sup> as they move from pediatric care to adult care.

Additional information about the MyHealth Passport program can be found at <http://www.sickkids.ca/Good2Go/What-we-do/MyHealth-Passport/index.html>. A sample passport is attached (Appendix 2) along with samples of a Patient Information and Medical Summary from other organizations (Appendix 3). A sample medication tracking form is attached in Appendix 4.

## **2. Patient State and Needs Assessment**

In this section, a more detailed description regarding the patient’s medical conditions, treatments and therapies can be provided to be used as the basis for a needs assessment. It’s important that the patient understand their condition(s) so that they can participate in the care planning process and make decisions about how to manage their condition.<sup>15</sup>

There is also an opportunity in this section to engage the patient in a self-assessment of their current physical, psychological, and social state, to identify areas where additional supports may be needed and where risks to the patient’s health may be most significant. Physicians and other care providers who frequently participate in patient assessment and planning note that patients may feel influenced by their families and/or peer group when developing care plans. As a result, it is important to encourage patients to be honest regarding their capabilities. Self-assessment questions could include:

- Questions about psychological well-being, for example, to measure mood, to determine if depression may be a concern, to see if there may be issues related to cognitive functioning and memory.
- Information about the patient’s social and support systems, for example, do they have family or friends near by to help? is there someone available to call in the case of emergency? who is their substitute decision-maker? does the patient participate in activities outside of the home and will they need assistance to continue?

- Asking patients to think about their current living situation and to identify physical challenges, such as eating and food preparation, walking and other movements, sleeping, and self care routines like washing and dressing. An assessment tool that focuses on the Instrumental Activities of Daily Living Scale (IADL) may be most helpful here.

Sample assessment tools are attached in Appendix 5 (a) – (d) for information purposes.

Information collected through these self assessments can then be used to develop a plan of care that identifies and coordinates the support services a patient will need in order to maintain or improve their health and to mitigate the risk of decline. For example:

- Does the patient need assistance administering their insulin or do they require short term assistance until they become more comfortable with self-injections?
- Does the patient need assistance with meal preparation?
- Does the patient need to be referred to an allied health professional or a medical specialist?
- Would it be appropriate to admit the patient to another facility such as a senior care facility or drug treatment centre or would they be better off receiving care at home?
- Is a full-time care giver required?
- When should the patient see their doctor for follow-up to ensure treatments are being adhered to and are achieving the expected result?

Some health care providers have found it useful to perform a standardized risk assessment of the patient at this stage in the planning process to help determine the timing of any additional follow-up. The idea is to identify patients who are at high risk for readmission and to ensure that those patients receive appropriate follow-up care in a timely manner to prevent a possible deterioration in their health

For example, the Credit Valley Hospital and Trillium Health Centre have been using the LACE Index Score (see Appendix 6) since 2011 (LACE stands for Length of stay, Acuity of Admission, Co-morbidities, and number of Emergency Department visits within the last six months.) “The



hospital has found the tool to accurately predict readmissions and that the team's awareness of readmission risk helps to inform discharge planning processes. The hospital has automated the LACE score calculation which now calculates daily, and readmission risk is being used as an entry criterion into customized and enhanced transition plans that better meet an individual's post discharge needs."<sup>16</sup>

Using this evidence-based system, it is possible to identify individuals who are at high risk of readmission and who should be seen by their primary care team as soon as possible, and individuals at who are at moderate risk of readmission and who should receive a scheduled follow-up phone call within 48 hours by the person/facility responsible for discharge, followed by a visit with their primary care team within a week of discharge from the hospital.<sup>17</sup> To facilitate scheduling, staff responsible for planning the patient's transition may wish to contact with the physician's office on the patient's behalf before the patient is released. As well, facilities may wish to reconsider releasing high risk patients on a Friday when there is a likelihood that the patient will not be able to be seen by a physician until at least the following Monday.

Finally, LINKS and other health care providers may wish to include in this section of the care plan information about how to recognize worsening symptoms, i.e., indicators that would signal to a patient or care giver the need for medical attention or immediate emergency care. According to Health Quality Ontario, "data shows that only 59% of Ontario's hospital patients knew which danger signs to watch for after going home from hospital. ... If an individualized care and discharge plan is conducted for every individual, every person leaving the hospital should be able to know what danger signs to watch out for (and) who to call if they need help ...".<sup>18</sup>

To facilitate this, patients could be provided with a list of possible symptoms and corresponding direction about who to contact, for example:

- If you have a flu that prevents you from taking your medication, contact your family physician.
- If you experience a fever, contact the transplant nurse.
- If the voices in your head get worse, contact you mental health professional.

- If your weight increases by more than three pounds in three days, double your diuretic. If no weight loss is experienced, contact the Congestive Heart Failure nurse on your Family Health Team, or your family physician.

### **3. Patient Goals**

The preparation of a coordinated care plan provides the patient and their health care professionals with the opportunity to have a discussion about the patient's goals and how they are going to address the areas identified through the assessment piece. It is important to involve patients in setting goals and in developing solutions to ensure that the plan makes sense to them and that it will fit with their lifestyle.<sup>19</sup> As well, in many cases it is helpful to select goals that can be measured by "small incremental changes in functioning in specific domains."<sup>20</sup> Patients that can achieve small gains in specific areas are more likely to be motivated and have higher self esteem.<sup>21</sup> Including the patient in developing strategies, activities and solutions to achieve their goals can help to encourage them to share in the responsibility for their care.

Many providers use a 'Smart Goals' format when developing patient goals and solutions (see Appendix 7 for samples).<sup>22, 23, 24</sup>

**S: Specific** – Stating clear, detailed goals that can be understood by everyone involved in the patient's care. This may involve breaking down larger goals into smaller, specific steps.

For example, a patient may state that their goal is to continue to live at home. This one goal could be broken down into several separate and distinct goals, such as being able to prepare a meal, being able to get in and out of the bathtub safely, remembering to take medications, being able to get dressed by themselves, and so on.

**M: Measurable** – Identify how the achievement of a goal can be measured in a way that is quantifiable so that changes/improvements can be seen.

For example, a patient may state that their goal is to take care of their dog. One of the specific steps involved in this goal is taking their dog for a walk. The measure may be to walk the dog three times per day, beginning with a short walk of 25 metres, then increasing the distance walked by 50 steps each week, until the patient is eventually able to walk around the entire block.

A: Achievable – Ensure that the goals the patient has identified are achievable. Are the resources and/or care givers in place to help with the implementation of the goals? Is it possible for the patient to achieve the goal given the limitations of their illness?

For example, a patient may identify that they would like to be able to drive a car again. However, it is clear that their deteriorating vision will not make this possible. In cases like these it may be helpful to delve deeper into the patient's needs and motivation. Why is it that they would like to drive? Do they have a specific place they would like to go? If they want to drive so they can attend church, perhaps arrangements could be made for another member of the congregation to drive them there. If the patient wants to drive to the grocery store, it may be possible to arrange for a taxi service or a home delivery service instead.

R: Realistic – Ensure the goals that the patient identified are realistic given their current abilities or resources.

For example, it may not be realistic for a patient to be able to prepare an elaborate Thanksgiving meal for a family of 12 this year, but it may be possible for the patient to prepare one or two dishes to bring to a dinner hosted by another family member.

T: Time oriented – Establish a practical timeframe for the achievement of goals to ensure that there has been sufficient opportunity for improvement to have taken place. Setting timelines may help to motivate patients to achieve their goals and will help the patient and the care givers to measure any progress.

For example, a patient who is learning to inject their insulin may require a care giver to do it for the first week, then for the care giver to teach and supervise the patient self-injection during the second week, with the goal that the patient to be proficient with self-injections by the end of the third week.

### **Self Care Considerations**

When developing the patient goals for a coordinated care plan, it is important to note who will be responsible for which activity. A number of different community or health care givers may be involved in the process, such as the primary physician, a physical therapist, a home care nurse, specific family members or friends, and so on.

However, many proponents of coordinated health care plans also recommend a self care component in the patient goals section of the care plan. The Skills for Health organization in the United Kingdom states that “self care is about working in partnership in a process of two-way communication, negotiation and decision making in which both the individual and the care professional contribute to the care planning process to achieve the best possible outcomes for the individual...”.<sup>25</sup> The patient contributes to the development of planning strategies to manage his condition, and participates in achieving his outcomes.

For example, a patient who requires a wheel chair and who wishes to spend more hours of the day in the chair rather than in bed will need assistance from a physiotherapist to build their muscles and to increase their tolerance for being in the chair. However, there is a self care component that the patient could be responsible for as well, e.g., scheduling and keeping the physiotherapy appointments, improving their sleep pattern by going to bed on time at night and by avoiding afternoon naps, thus giving the patient some control over their treatment and their progress.<sup>26</sup>

## **4. Discharge/Transition Planning**

An essential piece of the coordinated care planning process is the communication of information during the discharge process or any other care transition. A care transition refers to the transfer of

a patient between different settings and health care providers during the course of their treatment. “Transitions can occur at many different times and places in a person’s health care journey, and might include: referrals from a person’s family physician to specialist care, admission into a hospital, discharge out of the emergency department or hospital, and admission to a long-term care facility from the person’s home.”<sup>27</sup>

It is key that each health and community care worker involved in a patient’s care be aware of the coordinated care plan and that they use it as the basis for their own work with the patient to avoid conflicting goals, treatments, or negative drug interactions. Care transitions that are not well coordinated can result in an inadequate quality of care, compromised patient safety, low patient confidence and satisfaction with the care they are receiving, and can ultimately add unnecessary costs to the health care system.<sup>28</sup>

As well, research shows that poor communication during care transitions may increase the incidents of hospital readmissions with 1 in 5 hospitalizations being complicated by post discharge adverse events, and 25% of readmissions occurring within 30 days of discharge.<sup>29</sup> Conversely, a recent review conducted by the Evidence Development and Standards Branch of Health Quality Ontario showed that “individualized care and discharge planning and post-discharge support significantly reduced readmissions compared to usual care.”<sup>30</sup>

It is recommended that this section of a coordinated care plan provide documentation regarding the processes to be followed during the transition phase for the patient, for example:

- where the patient is going,
- how they are going to get there,
- when they are going,
- the contact information for the individual(s) on the receiving end,
- confirmation that the care plan has been shared with each of the health and/or community care providers,
- confirmation that the patient’s family has been notified about the transfer,

- contact information for the individuals responsible for the creation of the care plan so that care givers on the receiving end know whom to contact should they require additional information about the patient,
- a schedule of medical appointments or community care interactions that are to take place within the days following the transition,
- a reconciliation of medications being taken by the patient,
- a space for the care coordinator to describe the hand off or transfer of information that took place, including dates, times, contact persons, position, and contact information, for example:

January 10, 2014, 2:00pm

- Care coordinator, Sally Smith, spoke on the phone with patient’s daughter to confirm they were aware of the patient’s transfer to his home.
- Physiotherapist, John Jones, contacted by phone about the patient’s coordinated care plan and treatment to be received by the patient.
- Faxed referral and care plan to physiotherapist’s office same day following phone call.

The transition planning section of the care plan could also include a follow-up plan for the care givers or care coordinator at the originating facility, for example, instructions for the care plan coordinator to contact the primary physician to ensure the patient made it to their first appointment, or to call the home care worker to ensure a visit took place within the recommended timeframe. Sample discharge/transition forms are attached in Appendix 8.

Studies show that this kind of hand-off and follow-up significantly reduces the number of serious medical errors that can occur as well as the number of readmissions to hospital. “The consequences of substandard hand-offs may include delay in treatment, inappropriate treatment, adverse events, omission of care, increased hospital length of stay, avoidable readmissions, increased costs, inefficiency from rework, and other minor or major patient harm.”<sup>31</sup>

## 5. Review the Care Plan

The care plan coordinator may wish to note when and how the care plan will be reviewed to ensure that patient needs are being met and to assess whether changes to the plan are necessary. The literature recommends that the patient be involved in the review along with their care givers if at all possible, e.g., the primary physician, physiotherapist, etc. A patient with complex long term conditions may need their care plans reviewed more often than a patient with low level needs who may only have a review once a year.<sup>32</sup>

A care plan review is conducted for a number of reasons.<sup>33</sup>

- to assess whether care plan goals have been achieved,
- to determine if there are any barriers to progress,
- to provide an early warning signal regarding difficulties with the patient, the plan, the goals identified, the measures, etc.,
- to evaluate the suitability or quality of the care provided,
- to reassess current needs based on progress made,
- to determine whether the care plan still meets the patient's goals and needs,
- to revise the care plan if necessary,
- to set the date for the next review.

Following a review and revision of the coordinated care plan, it is important that all contributors and care providers receive a copy of the revised care plan and are instructed as to where any significant revisions were made. A sample review form is attached in Appendix 9.

### **Challenges to Coordinated Care Planning**

Coordinated care planning is not an easy process and there are several challenges that can hinder the proper development and implementation of a care plan.

#### **1. Poor Information Transfer**

While research shows that the transfer of information during the transition stage can prevent hospital readmissions and facilitate better care, communication between the various levels of

health and community remains a challenge. For example, a survey of home care providers and support services conducted by the Change Foundation in Ontario found that 27% of respondents stated they were not satisfied with the information provided to them prior to the first visit with the client who was recently transferred out of hospital. More than one third of the providers regularly relied on the client and their informal caregivers to pass along relevant information that could have been included in a coordinated care plan.<sup>34</sup>

Obstacles that may hinder information transfer include:<sup>35, 36</sup>

- a lack of time, staff and resources to commit to recording and communicating patient needs through the care planning process, or to following up with the patient after discharge,
- a lack of standardized communication tools and processes available for use by the health care or community facilities,
- the need to better integrate care planning and communication into the regular work flow,
- the inability for facilities to communicate with each other using compatible information technology,
- reluctance of care givers to participate in information sharing due to privacy concerns.

## **2. Inadequate, Inaccurate or Out of Date Information in the Care Plan**

At times, it may be difficult to collect adequate information from a patient to include in a care plan, or through human error, inaccurate information may be recorded. Examples of possible errors include:<sup>37</sup>

- an inadequate understanding of a patient's capacity to manage in the home environment
- a misbelief that a patient understands their care plan and post-discharge instructions because the patient has been living with the chronic condition for a long time,
- a failure to notice a deterioration in the patient's clinical status prior to discharge,
- difficulties encountered when assessing the patient's health status, leading to inaccurate assumptions about required levels of care or the appropriate setting for care,
- incomplete information given by the patient regarding medications they are already taking, possibly leading to medication errors,



- focusing on one condition and possibly missing other supports that are needed, e.g., addressing the physical needs but not realizing the patient also suffers from depression,
- not identifying key persons who are responsible for maintaining or updating the plan or and for communicating changes to the patient's entire care team, including family members.

### 3. Patient Compliance

It has been noted that involving the patient as an active contributor to the care plan is an important step to achieving patient compliance with the plan. However, not all patients want to be involved in the planning process. In the *Strengthening Assessment and Care Planning Guide* produced by the Department of Health in Victoria, Australia, it is noted that some patients are not motivated to set goals and may resist being involved in developing their care plan. The guide indicates that care planning is not for everyone and that goal development tends to work best for:

- “patients who are motivated toward achieving or participating in something specific,
- patients who have had a recent change (or decline) and are motivated to act,
- patients of any age or functional ability with the capacity for functional improvement or restorative gains.”<sup>38</sup>

That being said, some break downs in patient care are due to non-compliance by the patient. For example:

- Non-compliance with medication and other lifestyle recommendations is a major problem in patients with heart failure. Several studies indicate that the most commonly identified cause of worsening heart failure is non-compliance with medication and diet being anywhere from 21%–64% in patients.<sup>39</sup>
- Regimen adherence problems are common in individuals with diabetes, making glycemic control difficult to attain and increasing the risk of complications. The findings from a recent study showed patient-reported adherence rates for attending doctor's appointments at 71% and 72% respectively for type 1 and type 2 diabetic; adherence rates observed for diet were 39% and 37% respectively; and adherence rates for exercise were 37% and 35%, respectively.<sup>40</sup>

- Treating patients with mental illness is particularly challenging with one study showing that approximately three-quarters of patients prescribed psychotropic medication will discontinue their use over the course of a year, often without consulting their health professional.<sup>41</sup> Non-adherence is due to a number of reasons, such as:
  - medication-related side effects,
  - concerns about dependency,
  - belief that the medication isn't working,
  - feeling better, believing that the medication is no longer needed,
  - disorganization or apathy related to the mental health disorder,
  - lack of family support to ensure the medication is taken.<sup>42</sup>

#### 4. Privacy Concerns

Although Ontario's Information and Privacy Commissioner (IPC) released a publication in September 2009 regarding privacy issues in relation the patient 'circle of care', there still remains confusion in the health care community about when and with whom patient information can be shared. The brochure, *Circle of Care: Sharing Personal Health Information for Health-Care Purpose*, was written to help clarify when health professionals can assume a patient's *implied consent* to collect, use or disclose personal health information. The document can be accessed from the IPC website at <http://www.ipc.on.ca/images/Resources/circle-care.pdf>.

The confusion regarding privacy and the circle of care may be rooted in the fact that the term 'circle of care' does not appear in the *Personal Health Information Protection Act, 2004*. However, the IPC recognizes the term as "commonly used in the health-care community to describe the provisions in the *Act* that permit health-care providers to *assume* a patient's implied consent to collect and use personal health information – and to share that information with other health-care providers – in order to provide health care to that patient, unless the patient expressly indicates otherwise."<sup>43</sup>

As stated by the IPC Commissioner, “Personal health information may be shared within the *circle of care* – among health-care providers who are providing health care to a specific patient – but not outside that circle,” ... “Any sharing of personal health information with other health-care providers for purposes *other* than the provision of health care – or the sharing of personal health information with persons or organizations that are not health-care providers, such as insurers and employers – requires the express consent of the patient.”<sup>44</sup>

## 5. Implementation Issues

Of significant importance to the success of coordinated care planning is the implementation of appropriate work flows within the organizations involved in the process. Questions regarding who is responsible for creating, maintaining, monitoring and distributing care plans need to be addressed before efficient coordination between facilities or health care practitioners can occur. The literature provides a variety of possibilities, including a coordinated care planner, a discharge planner, a nurse, a primary care physician or other physicians within a facility. It may be best for the individual LINKS, hospitals, and other health care institutions to examine their work flows and to develop a process that works most effectively for them. While it is possible that a physician might coordinate the care plan, it is more likely to be another member of the health care team. Regardless of who is chosen, it is essential that someone be identified as the designated lead(s) for a patient’s coordinated care plan to ensure that the process works effectively for the patient.

Secondly, without the ability for members of a patient’s circle of care to easily update and access their care plan, use of the plan could be largely ineffective. Preparation of care plans in an electronic format would increase the accessibility and usability of the document by the patient and other care givers including the family physician, the home care worker, the Community Care Access Centre, the pharmacist, etc. Electronic care plans, especially if they were in a standardized format, would be easier to update and distribute, increasing the likelihood that they would be used and followed.

### **Positive Approaches to Coordinated Care Planning**

While there are several challenges involved in the practice of coordinated care planning, the literature on this topic outlines several positive approaches that can assist with, and hopefully improve, the care planning process. These approaches include:<sup>45</sup>

- Identifying someone to be responsible for the coordination and maintenance of the plan. When updates to a plan are made, there needs to be a system in place to distribute the updated care plan to the patient's care team and to the patients themselves.
- Involving the patient in all aspects of the care planning process, increasing the likelihood of compliance with the recommended treatments. When possible, involve the family, patient advocate or primary care giver in the planning process as well.
- Ensuring the patient understands the purpose of the care plan and the planning process. Prepare the care plan using language that is easy to understand; use plain language and avoid health care jargon. This can be particularly challenging if the patient is illiterate or does not understand the care planner's language. A translator or family member may need to be present to ensure the patient understands the care plan. Pictures or diagrams may also be helpful to the patient.
- Making the care plan available in a format that is easily accessible to the patient. Ensure the patient has a copy of the plan and ask them to keep a copy in a place that is easily accessible to them.
- Taking into account the issues that are important to the patient and reflecting those issues through the patient recovery goals.
- Facilitating seamless transitions by sharing information and responsibility among providers and patients.
- Thinking outside the box, beyond traditional treatments. For example, patients may benefit from coordinating services with community resources outside of the health care system, such as financial resources like welfare or food stamps, educational resources, support groups, or support programs like Meals on Wheels.<sup>46</sup>

## **Conclusion**

Key elements that health care providers may wish to include in their coordinated care plans include;

- a Patient Information and Medical Summary Section,
- a Patient State and Needs Assessment,
- a Patient Goals section, utilizing the SMART principles (Specific, Measurable, Achievable, Realistic, Time Oriented),
- a Transitions Planning section that includes documentation regarding the hand-off of the patient from one facility or medical/community care giver to the next,
- a Review of the Plan at an appropriate date.

Care providers may wish to review the common challenges and pitfalls that can hinder the proper development and implementation of care plans and put mitigating processes in place. As well, providers may wish to borrow from other jurisdictions that support coordinated care planning, especially involving the patient in the care planning process, identifying the appropriate person or persons to maintain and update the care plans, and to create the care plans in an electronic format that is easy to share with patients, their family members, and all care providers concerned.

Given the challenges facing Ontario with respect to the growing numbers of individuals who are likely to develop complex medical conditions over the next several years, there does seem to be value in coordinated care planning if it is done well and if it follows the positive approaches identified in the literature by those with successful and positive experiences in care coordination.

## Appendix 1 – Draft Ontario Links Coordinated Care Plan

**HealthLink** <<PATIENT NAME>>'s Coordinated Care Plan (<<HEALTH LINK NAME>>)

v5-7F

My identifiers		Last updated:	Last updated by:
Given name:	Preferred name:	Surname:	
Gender: Choose an item.	Date of birth:	OHIP insured: Choose an item.	
Address:	City:	Health card #:	
Province:	Postal code:	Preferred contact by: Choose an item.	
Telephone #:	Alternate telephone #:	Email address:	
Mother tongue:	Preferred official language: Choose an item.	Ethnicity/culture:	
Marital status: Choose an item.		Where I currently live: Choose an item.	
People who live with me: Choose an item.		People who depend on me:	
Substitute decision maker (SDM):		SDM telephone #:	
Emergency contact:		Emergency contact telephone #:	

My plan to achieve my goals for care								Last updated:	Last updated by:
Care team members who contributed to this plan:									
What is most important to me right now:									
What concerns me most about my healthcare right now:									
What I hope to achieve	What we can do to achieve it	Who will be responsible	Expected outcome	Confidence will achieve	Barriers and challenges	Results so far	Review date		

My plan for future situations					
When my heart/breathing stops, if someone is close by, I would want them to: Choose an item.					
If my condition(s) get worse and it looks like I might not survive, I would like to: Choose an item.					
Future situations	What I will do	What I will not do	Who will help	Telephone #	Review date

**HealthLink** <<PATIENT NAME>>'s Coordinated Care Plan (<<HEALTH LINK NAME>>)

v5-7F

My care team		Last updated:		Last updated by:		
Name	Role or relationship	Organization	Telephone #	Regular care team member	Lead care coordinator	I rely on most at home
				Choose an item.	<input type="checkbox"/>	<input type="checkbox"/>
				Choose an item.	<input type="checkbox"/>	<input type="checkbox"/>
				Choose an item.	<input type="checkbox"/>	<input type="checkbox"/>
				Choose an item.	<input type="checkbox"/>	<input type="checkbox"/>
				Choose an item.	<input type="checkbox"/>	<input type="checkbox"/>
				Choose an item.	<input type="checkbox"/>	<input type="checkbox"/>
The people I rely on at home are: Choose an item.						

My health conditions		Last updated:		Last updated by:	
	Condition description	Condition	Date of onset	Stability	Notes
Physical Health				Choose an item.	
				Choose an item.	
				Choose an item.	
				Choose an item.	
Mental Health				Choose an item.	
				Choose an item.	
				Choose an item.	
Other (e.g. social) Factors				Choose an item.	
				Choose an item.	
				Choose an item.	

Baseline vitals			
Height:	<i>m</i>	<i>in</i>	Weight: <i>kg</i> <i>lb</i> HbA1c: %
Allergies and intolerances			
Substance	Allergy or intolerance	Symptoms	Severity
	Choose an item.	Choose an item.	Choose an item.
	Choose an item.	Choose an item.	Choose an item.
	Choose an item.	Choose an item.	Choose an item.

My situation and lifestyle		Last updated:		Last updated by:	
How I work: Choose an item.		How adequate my income is for my health: Choose an item.			
Supplementary benefits I receive: Choose an item.		Choose an item.	Choose an item.	Choose an item.	
I follow my recommended diet: Choose an item.		How adequate my food is for my health: Choose an item.			
How I travel: Choose an item.		How difficult it is to travel: Choose an item.			
How difficult it is to read and understand information about my health: Choose an item.					
I smoke tobacco: Choose an item.	# of cigarettes/day:	# of pack years:		Quit date:	
I drink alcohol: Choose an item.	# of drinks in one sitting: Choose an item.	# of drinks/week:			
I have ever used other substances: Choose an item. Which: Choose an item. How often: Choose an item.					
I get 30 minutes of physical activity 3x/week: Choose an item.					
Other considerations (e.g. sleep habits):			Group memberships (e.g. religious, social, etc):		

**HealthLink** <<PATIENT NAME>>'s Coordinated Care Plan (<<HEALTH LINK NAME>>)

v5-7F

My assessed health needs		Last updated:		Last updated by:	
Assessment type	Assessment name	Completed	Date completed	Score	Actions taken
Frailty		Choose an item.			
Health literacy		Choose an item.			
ADL		Choose an item.			
IADL		Choose an item.			
Pain		Choose an item.			
Hospital re-admission risk		Choose an item.			
Cognition		Choose an item.			
Aggressive behaviour		Choose an item.			
Risk of self-harm		Choose an item.			
Mood		Choose an item.			

My most recent hospital visit		Last updated:		Last updated by:	
Hospital name:		Type of visit: Choose an item.			
Date of visit:		Date of discharge (if applicable):			
Reason for visit:		Complications:			
Name of hospital physician:		Telephone #:			
Key advice from hospital physician:					
Follow-up appointment made with:		Date of follow-up appointment:			

My current supports and services			Last updated:		Last updated by:	
Contact name	Organization	Services	Telephone #	Email address	Start date	End date

My known, current medications		Last updated:		Last updated by:				
Date of last medication reconciliation:		Performed by:						
My last medication change was:		It made me feel: Choose an item.						
Aides I use to take my medications: Choose an item.		Challenges I have taking medications:						
Drug name	Strength	Route	Frequency	Reason	Pharmacy	Start date	Change date	Prescriber



**HealthLink** <<PATIENT NAME>>'s Coordinated Care Plan (<<HEALTH LINK NAME>>)

v5-7F

My other treatments		Last updated:	Last updated by:
Surgical devices or changes (e.g. pacemaker, transplant, stent):			
Health education or counselling (e.g. MedsCheck or group counselling):		Next planned date:	
Assistive devices (e.g. oxygen cylinder, wheelchair):			
Self-monitoring routines (e.g. daily home blood pressure readings):			
Other treatments:			

My top 5 daily routines		Last updated:	Last updated by:
Time of day	What I will do	Contact for questions	Contact's telephone #
Morning			
Afternoon			
Evening			
Overnight			

My appointments and referrals		Last updated:	Last updated by:	
Date	Time	Provider name	Purpose	Notes

## Appendix 2 – Sample Patient Passport

Name	Jane Patient
DOB	December 1, 1999
Diagnosis	Type 1 Diabetes, January 2005
Operations	June 2012, tonsils
Medical	None
Hosp	Hosp adm for DKA in past 2 years: None ,Hosp adm for diabetes (DKA excl) in past 2 years: None ,Non-diabetes related hosp adm past 2 years: None
Insulin	Humalog, I take my insulin with a pen, 3 times a day
Meds	Thyroxin, None, No
Diet	I estimate carbs, gluten-free diet
Low Sugar	Diaphoretic, Pale, Dizziness, Shakiness, Tired, treatment-juice: 6 oz ,treatment-pop/soda: 4 oz
High sugar	Thirst, Urinary frequency, Tired, Dizzy
Allergies	Cats, Dogs
Immunization	DPTP , MMR, HIB, mening, Pneumovax, HPV
Screening	Last 3 A1C: N/A ,Eye exam: June 2013 - no issues ,urine alb: N/A ,TSH: N/A ,Thyroxin: N/A ,Celiac: Negative ,BP: Normal ,Chol: Normal ,LDL: Normal ,HDL: Normal ,triglys: Normal ,Creat: Normal ,GFR: Normal ,prot/creat: Normal
Coverage	OHIP
Pharmacy	Joe Pharmacist
Exercise	Hockey, swimming, piano
1° provider	Sally Doctor, 416-555-5555
Diab Prov	Sally Doctor, 416-555-5555
Special needs	None at this time.
Other	This is a sample only.
ICE	Jane Patient's parents 416-222-2222
Date Created	2/10/2014 <a href="http://www.sickkids.ca/myhealthpassport">www.sickkids.ca/myhealthpassport</a>

Source: Sample Passport from Toronto's Hospital for Sick Children

### Appendix 3 – Sample Patient Information and Medical Summaries

Computer Generated Patient Identification Label					CUMULATIVE PATIENT PROFILE					
					Allergies					
Social & Environmental History			Dates		Significant Family History					
(e.g., Lifestyle, Hobbies, Occupation)										
					Problem List		Date Recorded	Date Resolved / Controlled		
Reg. Exercise			<input type="checkbox"/> Y <input type="checkbox"/> N							
Drugs			<input type="checkbox"/> Y <input type="checkbox"/> N							
Smoking			<input type="checkbox"/> Y <input type="checkbox"/> N							
EtoH			<input type="checkbox"/> Y <input type="checkbox"/> N							
Medical / Surgical / OBS History			Dates							
Living Will			Date					M.D.		

Source: Hamilton Academy of Medicine, Hamilton, Ontario. <http://www.hamiltondoctors.ca/>

CUMULATIVE PATIENT PROFILE						
1. PATIENT IDENTIFICATION (Plate)			Codes /Nos.	6. ONGOING HEALTH CONDITIONS (e.g., problems, diagnoses, dates of onset)	Date Recorded	Date Resolved /Controlled
Mr. Mrs. Miss Ms.						
Address						
Home Phone						
I.D. # or File #						
Health Card No. [ ] [ ] [ ] [ ] - [ ] [ ] [ ] [ ] - [ ] [ ] [ ] [ ]						
Present Marital Status S M Sep D W Other		Sex M F	Date of Birth D M Y			
[ ] [ ] [ ] [ ] [ ]	[ ] [ ] [ ] [ ]	[ ] [ ]	[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]			
2. PERSONAL AND FAMILY DATA (e.g., occupation, life events, habits)			Dates			
3. PAST HISTORY RISK FACTORS (e.g., past serious illnesses, operations)			Dates	Codes /Nos.	Date Started	Date Discontinued
4. ALLERGIES/DRUG REACTIONS			Dates			
5. DATES OF: Initial Visit ↓				8. CONSULTANTS		
		General Assessment →				
		Summarized Record on CPP →				
Family and Community Medicine Information Systems (FACMIS) UNIVERSITY OF TORONTO © 1977						
				9.	M.D.	

Source: University of Toronto Family and Community Medicine Information Systems, Toronto Ontario.  
<http://www.dfcu.utoronto.ca/>

Completed by .....		Date .....	
1. Name of person being assessed		Address	
Date of birth		Telephone number(s)	
2. Name of GP		Address of general practitioner	
		Telephone number of general practitioner	

3. Name of next of kin		Address of next of kin	
		Telephone numbers(s)	
4. Marital status Married                      Single Divorced                      Civil partnership Other .....		5. Religion	
6. Medication currently being taken (add separate sheet if necessary)		7. Disabilities or impairments (e.g. wears glasses, uses a hearing aid etc.)	
8. Any known allergies?		9. Dietary requirements	
10. Any dependants (e.g. children, elderly parents etc.)?		11. Other agencies involved (e.g. social worker, probation etc.)	
Contact details of dependants		Contact details of other agencies involved	
12. Current or previous occupation		13. Any other requirements/urgent needs (e.g. diabetes, epilepsy)	

Source: Lloyd, Marjorie. A Practical Guide to Care Planning in Health and Social Care. London, UK: Open University Press, March 2010.

**MEDICAL SUMMARY - EPIC-IC**

<b>Date updated</b> _____	
<b>Patient Name</b> _____	<b>DOB</b> _____
<b>Parent's Name</b> _____	<b>Phone(H)</b> _____ <b>(W)</b> _____
<b>Address</b> _____	<b>E-mail</b> _____
<b>Other Emergency Contact</b> _____	<b>Phone</b> _____ <b>Relationship</b> _____
<b>Insurance</b> _____	
<b>Principal Diagnosis</b> _____	<b>PCP</b> _____
<b>Secondary Diagnosis</b> _____	<b>PCP Phone</b> _____
_____	<b>PCP Fax/E-mail</b> _____

<b>Emergency Plan Yes ___ No ___ Immunizations up-to-date Yes ___ No ___ Date</b> _____
<b>Allergies/Rxns (meds/foods/procedures)</b> _____

<b>Problem List (with critical equipment)</b>	

<b>Medications / Dose</b>	<b>Medications / Dose</b>

<b>Specialists</b>	<b>Phone Number/Fax/E-mail</b>

Source: American Academy of Pediatrics, Elk Grove Village Illinois. [www.aap.org/en-us/Pages/Default.aspx](http://www.aap.org/en-us/Pages/Default.aspx)

**Pediatric Care Plan Part I**

Child's Name _____	Nickname _____	DOB _____
Parent (Caregiver) _____ (Relationship) _____		
Address _____		
Phone #(home) _____	(Blocked? Y__N__)	Best time to reach _____ E-mail _____
Mom Alternate Phone _____		Dad Alternate Phone _____
Emergency Contact _____	Phone _____	Relationship _____
Emergency Contact _____	Phone _____	Relationship _____
Health Insurance/Plan _____		Identification # _____

**Diagnose(s):** ↓      → **Emergency Plan**     Yes     No      **Complexity Level** \_\_\_\_\_

Primary _____	ICD9 _____	Primary _____	ICD9 _____
Secondary _____	ICD9 _____	Secondary _____	ICD9 _____
Secondary _____	ICD9 _____	Secondary _____	ICD9 _____

**Allergies/reaction:** \_\_\_\_\_

\_\_\_\_\_

**Medications/dose:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

<b>PCP</b>	<b>Phone</b>	<b>Fax</b>	<b>E-Mail</b>
#1 Specialist/Specialty _____	Clinic/Hospital _____	Phone _____	Other (fax, e-mail, etc.): _____
#2 _____			Other (fax, e-mail, etc.): _____
#3 _____			Other (fax, e-mail, etc.): _____
#4 _____			Other (fax, e-mail, etc.): _____

Nursing Service/Respite \_\_\_\_\_ Phone \_\_\_\_\_

Source: Hitchcock Clinic, Lebanon New Hampshire, <http://www.dartmouth-hitchcock.org/>

## Appendix 4 – Sample Medicine Tracking Form

Fill out this list with all prescription drugs, over-the-counter drugs, vitamins, and herbal supplements you take. Review this list with the staff.

DRUG NAME	WHAT IT DOES	DOSE	HOW TO TAKE IT	WHEN TO TAKE IT	NOTES

## My Appointments

APPOINTMENTS AND TESTS	DATE	PHONE NUMBER

Source: Your Discharge Planning Checklist, CMS. [www.medicare.gov](http://www.medicare.gov)



## Appendix 5 (a) – Sample Assessment Tool

<u>Child's Name:</u>	<u>Nickname:</u>	<u>Date:</u>
<b>Common Presenting Problems/Findings with Specific Suggested Managements</b> ( ) <i>See specialist letter(s) attached</i>		
<b>Problem #1</b>	<b>Presenting Signs &amp; Symptoms</b>	
Suggested Diagnostic Studies:	Treatment Considerations:	
<b>Problem #2</b>	<b>Presenting Signs &amp; Symptoms</b>	
Suggested Diagnostic Studies:	Treatment Considerations:	
<b>Problem #3</b>	<b>Presenting Signs &amp; Symptoms</b>	
Suggested Diagnostic Studies:	Treatment Considerations:	
Comments on child, family, or other specific medical issues:		
<input checked="" type="checkbox"/>	Physician/Provider Signature	Print Name above
<input checked="" type="checkbox"/>	Family/guardian <i>signature</i> giving consent for release of this information to the emergency room	Print Name above

Source: Hitchcock Clinic, Lebanon New Hampshire, <http://www.dartmouth-hitchcock.org/>

**Appendix 5 (b) – Sample Self Assessments**

Assessment Information	Observations (please complete all boxes to show that they have been addressed)
<b>Biological: do you have any needs in the following areas?</b>	<b>Please state in the person’s own words where possible and record any measurements (including frequency where required)</b>
Breathing	
Eating (including appetite) and food preparation	
Sleeping and rest	
Washing and bathing	
Dressing	
Moving and walking	
Exercise and activities	
Hygiene and self-care (e.g., hair, nails, teeth, using the toilet, skin care, etc.	
Maintaining/losing weight	

Vital signs: blood pressure, temperature, pulse, skin colour and texture	
Psychological: do you have any needs in the following areas?	
Memory	
Thought disturbances	
Moods and Emotions	
Beliefs about others	
Perceptions	
Sensations (e.g., taste, touch, smell, sight and sound)	
Social: Do you have any needs in the following areas?	
Family support	
Friends/Peer support	

Meaningful occupation (including work, hobbies, etc.)	
Group membership	
Recreational activities	
Significant relationships	
Spiritual: do you have any needs in the following areas?	
Personal religious beliefs	
Personal cultural beliefs	

Source: Lloyd, Marjorie. A Practical Guide to Care Planning in Health and Social Care. London, UK: Open University Press, March 2010.

## Appendix 5 (c) - Kessler Psychological Distress Scale (K10)

### K10 Test

These questions concern how you have been feeling over the past 30 days. Tick a box below each question that best represents how you have been .

<b>1. During the last 30 days, about how often did you feel tired out for no good reason?</b>				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

<b>2. During the last 30 days, about how often did you feel nervous?</b>				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

<b>3. During the last 30 days, about how often did you feel so nervous that nothing could calm you down?</b>				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

<b>4. During the last 30 days, about how often did you feel hopeless?</b>				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

<b>5. During the last 30 days, about how often did you feel restless or fidgety?</b>				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

<b>6. During the last 30 days, about how often did you feel so restless you could not sit still?</b>				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

<b>7. During the last 30 days, about how often did you feel depressed?</b>				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

<b>8. During the last 30 days, about how often did you feel that everything was an effort?</b>				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

<b>9. During the last 30 days, about how often did you feel so sad that nothing could cheer you up?</b>				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

<b>10. During the last 30 days, about how often did you feel worthless?</b>				
1. None of the time	2. A little of the time	3. Some of the time	4. Most of the time	5. All of the time

Source: Available At: [www.nevdgp.org.au/files/programsupport/mentalhealth/K10\\_English\[1\].pdf](http://www.nevdgp.org.au/files/programsupport/mentalhealth/K10_English[1].pdf)

### Appendix 5 (d) - Instrumental Activities of Daily Living Scale (IADL)

<p><b>A. Ability to use telephone</b></p> <ol style="list-style-type: none"> <li>1. Operates telephone on own initiative; looks up and dials numbers, etc.</li> <li>2. Dials a few well-known numbers.</li> <li>3. Answers telephone but does not dial.</li> <li>4. Does not use telephone at all.</li> </ol>	<p><b>E. Laundry</b></p> <ol style="list-style-type: none"> <li>1. Does personal laundry completely.</li> <li>2. Launders small items by hand.</li> <li>3. All laundry must be done by others.</li> </ol>
<p><b>B. Shopping</b></p> <ol style="list-style-type: none"> <li>1. Takes care of all shopping needs independently.</li> <li>2. Shops independently for small purchases.</li> <li>3. Needs to be accompanied on any shopping trip.</li> <li>4. Completely unable to shop.</li> </ol>	<p><b>F. Mode of Transportation</b></p> <ol style="list-style-type: none"> <li>1. Travels independently on public transportation or drives own car.</li> <li>2. Arranges own travel via taxi, but does not otherwise use public transportation.</li> <li>3. Travels on public transportation when accompanied by another.</li> <li>4. Travel limited to taxi or automobile with assistance of another.</li> <li>5. Does not travel at all.</li> </ol>
<p><b>C. Food Preparation</b></p> <ol style="list-style-type: none"> <li>1. Plans, prepares and serves adequate meals independently.</li> <li>2. Prepares adequate meals if supplied with ingredients.</li> <li>3. Heats, serves and prepares meals or prepares meals but does not maintain adequate diet.</li> <li>4. Needs to have meals prepared and served.</li> </ol>	<p><b>G. Responsibility for own medications</b></p> <ol style="list-style-type: none"> <li>1. Is responsible for taking medication in correct dosages at correct time.</li> <li>2. Takes responsibility if medication is prepared in advance in separate dosage.</li> <li>3. Is not capable of dispensing own medication.</li> </ol>
<p><b>D. Housekeeping</b></p> <ol style="list-style-type: none"> <li>1. Maintains house alone or with occasional assistance (e.g. “heavy work domestic help”).</li> <li>2. Performs light daily tasks such as dishwashing, bed making.</li> <li>3. Performs light daily tasks but cannot maintain acceptable level of cleanliness.</li> <li>4. Needs help with all home maintenance tasks.</li> <li>5. Does not participate in any housekeeping.</li> </ol>	<p><b>H. Ability to Handle Finances</b></p> <ol style="list-style-type: none"> <li>1. Manages financial matters independently (budgets, writes checks, pays rent, bills goes to bank), collects and keeps track of income.</li> <li>2. Manages day-to-day purchases, but needs help with banking, major purchases, etc.</li> <li>3. Incapable of handling money.</li> </ol>

Source: Lawton, M.P., and Brody, E.M. “Assessment of older people: Self-maintaining and instrumental activities of daily living.” *Gerontologist* 9:179-186, (1969).

## Appendix 6 – LACE Scoring Tool

### LACE Index Scoring Tool

L

**Step 1: Length of Stay** Length of stay (including day of admission and discharge): \_\_\_\_\_ days

Length of stay (days)	Score (circle as appropriate)
1	1
2	2
3	3
4-6	4
7-13	5
14 or more	7

L

A

**Step 2: Acuity of Admission** Was the patient admitted to hospital via the emergency department?

If yes, enter "3" in Box A, otherwise enter "0" in Box A

A

C

**Step 3: Co-morbidities (see next page for explanations)**

Condition (definitions and notes on reverse)	Score (circle as appropriate)	
Previous myocardial infarction	+1	If the TOTAL score is between 0 and 3 enter the score into Box C.
Cerebrovascular disease	+1	
Peripheral vascular disease	+1	
Diabetes mellitus	+1	
Congestive heart failure	+2	
Chronic obstructive pulmonary disease	+2	
Mild liver disease	+2	If the score is 4 or higher, enter 5 into Box C
Moderate or severe liver disease	+4	
Any tumor (including lymphoma or leukemia)	+2	
Metastatic solid tumor	+6	
Dementia	+3	
Connective tissue disease	+3	
AIDS	+4	
<b>TOTAL</b>		

C

E

**Step 4: Emergency department visits** How many times has the patient visited an emergency department in the six months prior to admission (not including the emergency department visit immediately preceding the current admission)? Enter this number or 4 (whichever is smaller) in Box E.

Add numbers in Box L, Box A, Box C, and Box E to generate LACE score and enter into box below.

If the patient has a LACE score is greater than or equal to 10 the patient is deemed high risk for readmission within 30 days of discharge.

E

Source: Virtual ward Program. St Michael's Hospital. Used with permission from Dr. Irfan Dhalla. July 2012.

Source: Health Quality Ontario. Best Path, A Resource for Health Links – Evidence Informed Improvement Package, Transitions of Care. Toronto, ON: Queen's Printer for Ontario

**Appendix 7 – SMART Assessments**

Patient name		Date of birth	
Needs <i>(Specific: in person's own words where possible)</i>	Goals <i>(Measurable and achievable: including any assessment tool measurements)</i>	Interventions <i>(Realistic)</i>	Evaluation <i>(Timely)</i>
<b>Signatures</b>	Care coordinator	Client	Date

Source: Lloyd, Marjorie. A Practical Guide to Care Planning in Health and Social Care. London, UK: Open University Press, March 2010.



**Case snapshot: SMART goals<sup>34</sup>**

This case snapshot illustrates the use of 'SMART' goals, which are goals or objectives that are expressed so as to be:

- S: Specific
- M: Measurable
- A: Achievable
- R: Realistic
- T: Time oriented.

An existing HACC client identified some new goals - to attend a granddaughter's wedding in twelve weeks and be included, without a walking stick, in the wedding photos.

The goals were 'unpacked' to be more specific with input from a physiotherapist. SMART objectives were developed to achieve each goal.

Goals		SMART objectives to support goal attainment				
		Specific	Measurable	Achievable	Realistic	Time oriented
1	Be physically capable of attending grand-daughter's wedding	Physio-therapist designed home-based exercise program	A home-based program, for 30 minutes each day, implemented over an eight week period	Yes – person is motivated; physio-therapist is available	yes	Exercise program to commence by 1 June and finish by 30 August
2	Be included without a walking stick in the wedding photos	Be able to stand for 15 minutes at any one time without a walking stick	As above	Yes – Up until quite recently person was able to stand independently	yes	Achieved by date of wedding – 15 September

This information was then translated into a care plan.

- The physiotherapist designed the home-based program.
- The physiotherapist demonstrated the program and provided instructions to the person and the HACC Team Leader. The HACC Team Leader then wrote the service plan with instructions for the community care worker detailing the specific role and tasks, and provided a copy to the person.
- The community care worker prompted the person and provided motivational support and encouragement during the (existing) home care visits.
- The person completed a simple checklist each time the 30 minute exercise program was completed.
- After six weeks the HACC Team Leader faxed a copy of the checklist to the physiotherapist, who reviewed progress based on telephone discussion with the person. The physiotherapist kept the person and HACC Team Leader (including the community care worker) in the communication loop if any program changes or adjustments were required.

Source: Victorian Government Department of Health. Strengthening assessment and care planning - A guide for HACC assessment services in Victoria. Melbourne, Victoria: Aged Care Branch Victorian Government Department of Health

Appendix 8 – Sample Discharge (or Transition) Plans

<b>DISCHARGE CHECKLIST</b>	
Date of Admission to Ward:	_____
<b>Expected date of discharge:</b>	_____ <b>Date set:</b> _____
Relatives/carer/friends informed? Yes	<input type="checkbox"/> By patient <input type="checkbox"/> By staff <input type="checkbox"/>
<b>Transport arranged:</b>	
Own <input type="checkbox"/> Booked <input type="checkbox"/>	Expected time of arrival: _____
Ambulance <input type="checkbox"/> Booked <input type="checkbox"/>	Expected time of arrival: _____
<b>Medication:</b>	
Own <input type="checkbox"/> New medicines and medication list <input type="checkbox"/>	
Transfer Letter	<input type="checkbox"/>
<b>Social Services</b> <input type="checkbox"/>	Referral date: _____ Assessment date: _____
<b>OT</b> <input type="checkbox"/>	Referral date: _____ Assessment date: _____
<b>Physiotherapy</b> <input type="checkbox"/>	Referral date: _____ Assessment date: _____
<b>Other</b> <input type="checkbox"/>	Referral date: _____ Assessment date: _____
<i>(please specify)</i>	
<b>Actual date of discharge:</b> _____	
Transfer to discharge lounge:	Yes/No _____ Time: _____
Reasons for difference in expected date of discharge and actual date of discharge <i>(please tick as applicable)</i>	
Diagnostic capacity – delays due to lack of services (eg MRI/CT scan)	_____
Waiting for test results	_____
Waiting for medical review for discharge	_____
Medical consultant delay	_____
Allied health delay (referral too late/unable to respond to request)	_____
Referral to community provider/s made too late	_____
Patient waiting for supply of:	
Consumables/equipment	_____
Medication	_____
Transport	_____
Other health facilities (no bed available)	_____
Palliative care/hospice	_____
Rehabilitation	_____
Care nursing home (high care)	_____

Source: Government of Scotland. <http://www.scotland.gov.uk/Publications/2007/10/23093529/31>

"Your Hospice"

1/1

**DISCHARGE PLAN**

Planned Date of Discharge: \_\_\_\_\_ Start of Care \_\_\_\_\_ Total Length of Stay \_\_\_\_\_

Patient Diagnosis: \_\_\_\_\_

**TYPE OF DISCHARGE:**

- Revocation
- Moving from service area
- Transfer to non-contracted hospital or NF
- Change in Hospice
- Patient refusing service
- Other: \_\_\_\_\_
- Extended Prognosis
- Unsafe environment

**DESCRIPTION OF CIRCUMSTANCES RELATED TO DISCHARGE/TRANSFER:**

\_\_\_\_\_  
 \_\_\_\_\_

**PATIENT/FAMILY INVOLVEMENT**

\_\_\_\_\_  
 \_\_\_\_\_

**PROBLEMS/NEEDS FOR CONTINUED CARE (SYMPTOM CONTROL)**

\_\_\_\_\_  
 \_\_\_\_\_

**REFERRALS NEEDED (OTHER HOSPICE, HOME HEALTH, SNF, COMMUNITY RESOURCES, ETC.):**

\_\_\_\_\_  
 \_\_\_\_\_

**MEDICINE NEEDS: (ATTACH CURRENT MEDICATION PROFILE, DRUGS SENT WITH PATIENT, PRESCRIPTIONS PROVIDED, ETC.)**

\_\_\_\_\_  
 \_\_\_\_\_

**CONTINUING NEEDS:**

Equipment \_\_\_\_\_

Medical Supplies: \_\_\_\_\_

Caregiving: \_\_\_\_\_

Education/Instructions: \_\_\_\_\_

\_\_\_\_\_  
 \_\_\_\_\_

**COMMUNICATED WITH THE FOLLOWING STAFF:**

<input type="checkbox"/> RN	<input type="checkbox"/> Social Worker	<input type="checkbox"/> Spiritual Counselor	<input type="checkbox"/> Bereavement Counselor	<input type="checkbox"/> Volunteer
<input type="checkbox"/> Hospice Physician	<input type="checkbox"/> Attending Physician	<input type="checkbox"/> Other		
Method of communication:		<input type="checkbox"/> Direct (in person or telephone)	<input type="checkbox"/> Indirect (voicemail or written)	

Employee: <small>(Last, First)</small>	Signature:	Discipline:
Patient Name: <small>(Last, First)</small>	MR #:	Date:

White - Medical Record      Yellow - Facility/Home Record  
 hcf-disch-plan\_hospice-rev.doc Updated 11/30/2011

Source: Pacific Healthcare Consultants, Newport Beach, California.

<http://www.pacifichealthcareconsultants.com/>

## Appendix 9 – Review of Care Plan

Issues/problems (in priority order)	Agreed goal (measurable)	Action/s to be taken and by whom	Target date
1. Shopping (short term)	1.1 To have help with weekly shopping whilst person recovers from illness	Action: Fortnightly shopping assistance Who: Person, HACC community care worker	Goal fully achieved; shopping assistance no longer required.
2. Domestic assistance	2.1 To have help with house cleaning until the person can self-manage this again	Action: Arrange for short-term domestic assistance; train person in energy conservation methods; arrange light weight equipment Who: Person, occupational therapist, team leader and community care worker	Goal partially achieved; person now able to fully complete some tasks and partially complete others. See revised care plan for new actions.
3. Emotional wellbeing - lonely/ social isolation	3.1 To attend community group or club	Action: Supported attendance at various groups until finds preferred one Who: HACC community care worker, volunteer	Goal partially achieved – has tried three groups and found one they like. See revised care plan for new actions re transport and attendant care.

Source: Victorian Government Department of Health. Strengthening assessment and care planning - A guide for HACC assessment services in Victoria. Melbourne, Victoria: Aged Care Branch Victorian Government Department of Health

## Endnotes

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<sup>1</sup> Chavis V, Lemieux J, and Vuckovic N. Global Imperative to Redesign the Nucleus of Care - An Intel White Paper on Coordinated Primary Care. Santa Clara, CA: The Intel Corporation; June 2012. p. 14.

<sup>2</sup> Waddington C, and Egger D. Integrated Health Services – What and Why? Technical Brief No.1, May 2008. Geneva, Switzerland: World Health Organization. p. 1.

<sup>3</sup> OECD (2013), OECD Reviews of Health Care Quality: Sweden 2013: Raising Standards, OECD Publishing. Available at: <http://dx.doi.org/10.1787/9789264204799-en>. Accessed: February 2014.

<sup>4</sup> Ontario Ministry of Finance. Ontario Populations Projections Update. Toronto, ON: Queen's Printer for Ontario, 2013. Available at: <http://www.fin.gov.on.ca/en/economy/demographics/projections/>. Accessed: February 2014.

<sup>5</sup> Health Quality Ontario. Quality Monitor - 2012 Report on Ontario's Health System. Toronto, ON: Queen's Printer for Ontario, 2012. p. 36.

<sup>6</sup> Meyers D, Peikes D, Genevro J, Peterson Greg, Taylor EF, Tim Lake T, Smith K, Grumbach K. The Roles of Patient-Centered Medical Homes and Accountable Care Organizations in Coordinating Patient Care. AHRQ Publication No. 11-M005-EF. Rockville, MD: Agency for Healthcare Research and Quality. December 2010. p. 3.

<sup>7</sup> Mental Health Commission. Guidance Document on Individual Care Planning Mental Health Services. Dublin, Ireland: Mental Health Commission. April 2012. p.8.

<sup>8</sup> Health Quality Ontario. Quality Monitor - 2012 Report on Ontario's Health System. Toronto, ON: Queen's Printer for Ontario, 2012. p. 23.

<sup>9</sup> Lowes R. Patient-centered care for better patient adherence. Family Practice Management, 1998 March; 5(3):46-57. Leawood, KS: American Academy of Family Physicians. Available at: <http://www.aafp.org/fpm/1998/0300/p46.html>. Accessed: February 2014.

<sup>10</sup> Carter C, Heffron K, Pola-Money, G. Building A Medical Home. Salt Lake City, UT: Medical Home Portal, Updated August 2013. Available At: <http://www.medicalhomeportal.org/clinical-practice/building-a-medical-home/care-coordination;>. Accessed: February 2014.

<sup>11</sup> Medical Home Learning Collaborative. Introduction to Essential Care Plan Components - The Comprehensive Care Plan. Greenfield, NH: Center for Medical Home Improvement, June 2007. p. 1

<sup>12</sup> Sunnybrook Health Sciences Centre. MyChart. Toronto, ON: Toronto Sunnybrook Health Sciences Centre. Available at: <http://sunnybrook.ca/content/?page=mychartlogin-learnmore>. Accessed: April 2014.

<sup>13</sup> Sunnybrook Health Sciences Centre. MyChart. Toronto, ON: Toronto Sunnybrook Health Sciences Centre. Available at: <http://sunnybrook.ca/content/?page=mychartlogin-learnmore>. Accessed: April 2014.

<sup>14</sup> The Hospital for Sick Children. My Health Passport. Toronto, ON: The Hospital for Sick Children. Available at: <http://www.sickkids.ca/Good2Go/What-we-do/MyHealth-Passport/index.html>. Accessed: February 2014.

- 
- <sup>15</sup> Harvey J. of Helen Sanderson Associates. Key elements of personalised care planning in long term conditions and personal health budgets. London, UK: Department of Health, June 2010. p. 6.
- <sup>16</sup> Health Quality Ontario. Best Path, A Resource for Health Links – Evidence Informed Improvement Package, Transitions of Care. Toronto, ON: Queen’s Printer for Ontario, 2013. p. 24.
- <sup>17</sup> Health Quality Ontario. Best Path, A Resource for Health Links – Evidence Informed Improvement Package, Transitions of Care. Toronto, ON: Queen’s Printer for Ontario, 2013. p. 18.
- <sup>18</sup> Health Quality Ontario. Best Path, A Resource for Health Links – Evidence Informed Improvement Package, Transitions of Care. Toronto, ON: Queen’s Printer for Ontario, 2013. p. 22.
- <sup>19</sup> Harvey J. of Helen Sanderson Associates. Key elements of personalised care planning in long term conditions and personal health budgets. London, UK: Department of Health, June 2010. p. 5.
- <sup>20</sup> National Treatment Agency for Substance Misuse. Care Planning Practice Guide. London, UK: National Treatment Agency for Substance Misuse, August 2006. p. 16
- <sup>21</sup> National Treatment Agency for Substance Misuse. Care Planning Practice Guide. London, UK: National Treatment Agency for Substance Misuse, August 2006. p. 16
- <sup>22</sup> Lloyd M. A Practical Guide to Care Planning in Health and Social Care. New York, NY: McGraw Hill Education, University Open Press, March 2010. p. 59 - 60.
- <sup>23</sup> National Treatment Agency for Substance Misuse. Care Planning Practice Guide. London, UK: National Treatment Agency for Substance Misuse, August 2006. p. 16
- <sup>24</sup> Pascale K, Goal Directed Care Planning Toolkit: Practical strategies to support effective goal setting and care planning with HACC clients. Victoria, AU: EMR HACC Alliance, March 2013. p. 12
- <sup>25</sup> Skills for Health, and Skills for Change. Common Core Principles to Support Self Care - A Guide to Support Implementation. Bristol, UK: Skills for Health. 2008. p. 4. Available at: [www.skillsforcare.org.uk/.../Skills/Self-care/Commoncoreprinciples.pdf](http://www.skillsforcare.org.uk/.../Skills/Self-care/Commoncoreprinciples.pdf). Accessed: February 2014.
- <sup>26</sup> Harvey J. of Helen Sanderson Associates. Key elements of personalised care planning in long term conditions and personal health budgets. London, UK: Department of Health, June 2010. p. 7.
- <sup>27</sup> Health Quality Ontario. Best Path, A Resource for Health Links – Evidence Informed Improvement Package, Transitions of Care. Toronto, ON: Queen’s Printer for Ontario, 2013. p. 11.
- <sup>28</sup> Health Quality Ontario. Best Path, A Resource for Health Links – Evidence Informed Improvement Package, Transitions of Care. Toronto, ON: Queen’s Printer for Ontario, 2013. p. 28.
- <sup>29</sup> Institute for Healthcare Improvement. Smart Discharge Protocol - Self Learning Packet. Cambridge, MA: Institute for Health Care Improvement, July 2012. Available at: <http://alwaysevents.pickerinstitute.org/wp-content/uploads/2011/11/SMART-self-learning-packet1.pdf>. Accessed: February 2014.

- 
- <sup>30</sup> Health Quality Ontario. Best Path, A Resource for Health Links – Evidence Informed Improvement Package, Transitions of Care. Toronto, ON: Queen’s Printer for Ontario, 2013. p. 22.
- <sup>31</sup> Joint Commission Centre for Transforming Health. Improving Transitions of Care: Hand-off Communications. Washington, DC: Joint Commission Centre for Transforming Health. May 2013. p. 2.
- <sup>32</sup> Harvey J. of Helen Sanderson Associates. Key elements of personalised care planning in long term conditions and personal health budgets. London, UK: Department of Health, June 2010. p. 8.
- <sup>33</sup> Mental Health Commission. Guidance Document on Individual Care Planning Mental Health Services. Dublin, Ireland: Mental Health Commission. April 2012. p.21.
- <sup>34</sup> Health Quality Ontario. Best Path, A Resource for Health Links – Evidence Informed Improvement Package, Transitions of Care. Toronto, ON: Queen’s Printer for Ontario, 2013. p. 11.
- <sup>35</sup> Caring about care planning: A survey of assessment and care planning tools, processes and perspectives from residential settings for older people in the Republic of Ireland.
- <sup>36</sup> Health Quality Ontario. Best Path, A Resource for Health Links – Evidence Informed Improvement Package, Transitions of Care. Toronto, ON: Queen’s Printer for Ontario, 2013. p. 27.
- <sup>37</sup> Health Quality Ontario. Best Path, A Resource for Health Links – Evidence Informed Improvement Package, Transitions of Care. Toronto, ON: Queen’s Printer for Ontario, 2013. p. 23.
- <sup>38</sup> Victorian Government Department of Health. Strengthening assessment and care planning - A guide for HACC assessment services in Victoria. Melbourne, Victoria: Aged Care Branch Victorian Government Department of Health, March 2011. p 147.
- <sup>39</sup> Van der Wal M.H.L., Jaarsma T, and Van Veldhuisen D.J. Non-compliance in patients with heart failure; how can we manage it? *European Journal of Heart Failure* (2005). 7 (1): 5-17. Oxford, UK: Oxford Journals. January 2005. Available at: <http://eurjhf.oxfordjournals.org/content/7/1/5.full>. Accessed: February 2014.
- <sup>40</sup> Delamater A. Improving Patient Adherence. *Clinical Diabetes* (April 2006), vol. 24, no. 2: 71-77. Alexandria, VA: American Diabetes Association, April 2006. Available at: <http://clinical.diabetesjournals.org/content/24/2/71.full>. Accessed: February 2014.
- <sup>41</sup> Mitchell J, Selmes T. Why don’t patients take their medicine? Reasons and Solutions in Psychiatry. *Advances in Psychiatric Treatment* (2007), 13: 336-346. London, UK: The Royal College of Psychiatrists, September 2007. Available at: <http://apt.rcpsych.org/content/13/5/336.full>. Accessed: February 2014.
- <sup>42</sup> Hazelden Foundation. Behavioural Health Evolution - Medications Play a Key Role in Treatment. Lebanon, NH: Hazelden Foundation; 2014. Available at: [www.bhevolution.org/public/medications.page](http://www.bhevolution.org/public/medications.page). Accessed: February 2014.
- <sup>43</sup> Spence, Bob. News Release - Privacy Commissioner Cavoukian and Seven Health Organizations Team up to Eliminate Confusion Over Key Element of Health Privacy Law, Toronto, ON: Information and Privacy Commissioner of Ontario, September 2, 2009.

<sup>44</sup> Spence, Bob. News Release - Privacy Commissioner Cavoukian and Seven Health Organizations Team up to Eliminate Confusion Over Key Element of Health Privacy Law, Toronto, ON: Information and Privacy Commissioner of Ontario, September 2, 2009.

<sup>45</sup> Mental Health Commission. Guidance Document on Individual Care Planning Mental Health Services. Dublin, Ireland: Mental Health Commission. April 2012. p.10.

<sup>46</sup> Meyers D, Peikes D, Genevro J, Peterson Greg, Taylor EF, Tim Lake T, Smith K, Grumbach K. The Roles of Patient-Centered Medical Homes and Accountable Care Organizations in Coordinating Patient Care. AHRQ Publication No. 11-M005-EF. Rockville, MD: Agency for Healthcare Research and Quality. December 2010. p. 4.