

**Toward Standard Definitions of Waiting Times
for Health Care Services**

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A Working Paper

prepared for the

Western Canada Wait List Project

For discussion purposes only

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EXECUTIVE SUMMARY

There are currently no standard and universally accepted definitions for waiting times in Canada for general surgery, hip and knee replacement, cataract surgery, MRIs and children's mental health. The Western Canada Waiting List Project (WCWL) has recognized the need to establish such standard definitions to improve the accuracy and comparability of waiting time information as well as to make such standardized comparative information available to physicians and their patients. Specifically, this report strives to provide a comprehensive review of the definitions and measures of waiting times currently used across procedure groups and jurisdictions, identify and define a comprehensive range of waiting times for the above named procedures and discuss the key issues and implementation challenges facing the establishment of standard definitions for waits in Canada.

The results of a comprehensive literature review revealed that the majority of studies focus primarily on three distinct types of waiting times: waits for a referred visit to a specialist, waits to receive a procedure or diagnostic service and total waiting time. While most waiting periods are defined as terminating when the patient receives care, the differences lie primarily in how the beginning points of the waits are defined. Waiting times for hospital based services, for example, were defined as beginning when the "decision to treat" was made by both the physician and patient or alternatively, when the patient was "booked" for the procedure and placed on a hospital waiting list. While these definitions may be appropriate for the procedures and circumstances within which they are delivered, their variability represents a problem when there is a need to aggregate and/or compare this information across jurisdictions, procedures and specialty groups.

Building on the available information, a set of standard waiting times are identified and defined for based on a comprehensive understanding of the "standard" paths to care for each service type. The paths to care approach provides valuable information regarding the potential waiting periods facing patients as well as highlight the key processes or milestones in the course of care that may serve to define the start and end of each waiting period. Four waiting periods were identified and defined for surgery:

- (1) Wait to primary care (Date of contact to Date of consultation);
- (2) Wait to initial specialist/surgical consultation (Date of referral to Date of consultation);
- (3) Wait to "decision to treat" (Date of request for test to Date of test and/or Date of referral to date of subsequent specialist/surgical consultation); and
- (4) Wait to Surgery (Date of "decision to treat" or Date of booking to Date of surgery)

Three waiting periods were defined for MRIs:

- (1) Wait to primary care (Date of contact to Date of consultation);
- (2) Wait to initial specialist/surgical consultation (Date of referral to Date of consultation); and
- (3) Wait to MRI (Date of request for MRI to Date of MRI)

Finally, six waiting periods were defined for children's mental health services:

- (1) Wait to primary care or pediatric consultation (Date of initial request to Date of consultation);
- (2) Wait to community health assessment (Date of referral to Date of assessment);
- (3) Wait to psychiatric consultation (Date of referral to Date of psychiatric consult);
- (4) Wait to in-patient mental health services (Date of request for admission or booking to Date of admission);
- (5) Wait to out-patient/community mental health services (Date of referral to Date of first out-patient visit); and
- (6) Wait to follow-up services (Date of referral to Date of first follow-up visit).

This work represents the first step toward the establishment of standard definitions for waiting times for medical services. There will likely be several challenges facing the implementation and operationalization of these standards including issues such as the validity and generalizability of standards definitions and the availability of waiting list data and standard processes involved in the delivery of health care services.

The immediate challenge lies in the next steps toward the establishment of standard definitions for waiting times in Canada. The establishment of standard and universally accepted definitions for waiting times can only be achieved through a process that focuses on consensus building among key stakeholder groups, a process similar to that adopted by the WCWL Project.

1.0 INTRODUCTION

Despite a growing concern and interest in waiting lists and waiting times for medical services in Canada, there are currently no standard or universally accepted definitions of waiting times for a broad range of services or procedures. There is equally little agreement regarding precisely when the waiting time should begin. The Western Canada Waiting List Project (WCWL), like other groups and observers before it, has recognized the need to establish such standard definitions to improve the accuracy and comparability of waiting time information across procedures and jurisdictions as well as to make such standardized comparative information available to physicians and their patients. The establishment of standard definitions represents the first step in determining whether patients are gaining access to care within a reasonable time.

The primary purpose of this paper is to lay the ground-work for the development of standard definitions of waiting times for selected procedures. The specific objectives of the paper are as follows:

- To review and synthesize the relevant published and gray literature to identify definitions and measures of waiting time currently used both within Canada and internationally for a broad range of procedures;
- To identify a comprehensive range of possible definitions of waiting times through an examination of the paths of care for the selected procedures identified by the WCWL project (knee and hip replacement, cataract surgery, general surgery, children's mental health services and MRI);
- To discuss the key issues and implementation challenges and processes relevant to the establishment of standard definitions of waiting times in these areas.

2.0 LITERATURE REVIEW

Researchers and policy makers alike have begun to call for the establishment of standard definitions and measures of waiting times to improve the quality and accuracy of waiting list data (Weaver, 1981; Naylor, 1991, Amoko et al., 1992; McDonald et al., 1998; Sanmartin et al., 2000). These standards have yet to be established in most jurisdictions and for most services and procedures. As a result, researchers continue to investigate waiting times using a broad range of definitions and measures that vary across studies, geography, types of procedures and so on. A review of the literature on waiting times serves to provide a comprehensive list of definitions used, but also to highlight this variation as well as provide some insight regarding the level of agreement currently existing within various jurisdictions and specialty groups.

2.1 Search and Synthesis Strategies

Studies focussed on waiting lists and waiting times were sought in both the published and "gray" literatures. Literature searches were conducted in various medical and social science databases, including MEDLINE, HealthSTAR, CINAHL and SOCIOFILE. The gray literature was identified through direct contact with various health research institutes, health care organizations and Canadian and international government agencies.

The search resulted in the identification of a broad range of studies focussed on waiting lists and waiting times for various procedure and specialty groups. The nature of the studies ranged from descriptive works focussed primarily on reporting waiting times for selected services to more empirical studies focussing on the identification of factors affecting the length of queues and waiting times. Given the purpose and focus of this project, the information was reviewed and synthesized around two key constructs:

- Definition of the waiting period (i.e. start time and end time);
- Method used to measure waiting times.

2.2 Defining Waiting Times

The studies reviewed focus primarily on three distinct types of waiting times: waits for a referred visit to a specialist, waits to receive a procedure or diagnostic service and total waiting time. The differences lie primarily in how the beginning and end-points of these waits are defined, that is, when the waiting period begins and ends. The results of the literature review are presented in Table 1.

2.2.1 Specialist Waiting Time

Seven waiting list studies conducted in Canada and the UK addressed the issue of waiting times for specialist services, often described in the UK as out-patient consultation services. These studies focussed on waiting times for various procedures including orthopedic surgery as well as a broad range of surgical and diagnostic procedures. While all studies agree that the waiting period ends with the specialist consultation, there are some differences regarding specifically when the waiting time begins.

In a study of waiting lists for orthopaedic services in the UK, Fordham (1987) defined the waiting time for a consultation with the orthopaedic surgeon as the time between the date of the consultation with the general practitioner (GP) to the date of the specialist consultation (Fordham, 1987). In their semi-annual report on waiting times in British Columbia, the British Columbia Medical Association (BCMA) defined waiting times for specialist consultations as beginning some time after the GP office visit (BCMA, 1998(a)(b)).

Other studies have used a more specific point in time, the GP referral to the specialist, to mark the start of the waiting period (Ho et al., 1987; Ramsay & Walker, 1998; Smith, 1994). A slightly modified definition, when the out-patient clinic received the GP referral for a specialist consultation, was used by Hochuli (1988) in his review of orthopaedic waiting lists in the UK.

In the late 1990's, the Department of Health in the UK has collected waiting time information for specialist consultations at the national level. The data are collected by each Health Authority and reported to the Department of Health on a quarterly basis. To ensure the comparability of the data, standard definitions were introduced at this time. Waiting times for specialist consultations in the UK are defined as the time between the date of the referral from the GP and the date of the specialist consultation (Dept of Health, 1997).

2.2.2 Hospital Waiting Times: In-patient and Out-patient Services

There is a high degree of consistency regarding the point in time used to mark the start of the waiting period for hospital-based services. In several studies, waiting times for hospital based services were defined as beginning when both patient and physician agree that treatment is necessary and desirable, often referred to as the “decision to treat”, and ending with receipt of care (Hanning, 1996; Morgan et al., 1997).

The decision to treat is often assumed to take place during the last pre-surgical consultation with the specialist or surgeon. The date of this visit, therefore, is often used as a proxy measure for the date of the treatment decision (Coyte et al., 1994; Ho et al., 1994(a)(b)). Administrative physician claims data and hospital separation data have been used in Manitoba and Nova Scotia to retrospectively estimate waiting times for a broad range of procedures. The waiting time for hospital based services was defined as starting with the last pre-surgical consultation (Nova Scotia, 1996; DeCoster et al., 1999). The use of the last pre-surgical consultation as the time of the decision to treat has not been validated. However, a recent study conducted in BC used both waiting list data and physicians claims data to determine precisely when, during the course of care, patients are placed on the list. The results indicate that most patients waiting for knee replacement (64%), hip replacement (68%) and CABG (78%) were placed on the waiting list following their last pre-surgical consultation (Sanmartin, 2000). In their annual physician survey of waiting times in Canada, the Fraser Institute defines waiting times to treatment as the number of weeks waited between the specialist appointment and treatment (Ramsay & Walker, 1994-1998). The report, however, does not indicate which specialist visit.

Waiting times for services have also been defined as beginning when the patient is booked for surgery and placed on the hospital waiting list. Studies conducted in Canada and the UK on waiting times for a range of surgical procedures, including ophthalmologic surgery and orthopaedic surgery, have identified placement on the hospital waiting list or booking as the start of the waiting period for these services (Williams et al., 1983; Jacobs & Hart, 1990; Smith, 1994; Clover et al., 1998; Hadjistravropoulos et al., 1998). In BC’s Surgical Waiting List Registry data patient waiting time for surgery and other in- and out- patient procedures is defined as starting when the patient is booked for surgery and placed on the hospital waiting list (BC Min of Health, 1995). The BCMA’s semi-annual report on waiting times in BC defines waits for hospital-based services as commencing when “the specialist books a surgical or medical intervention” (BCMA, 1998, pg 6). This definition is commonly used in studies on waiting times for cardiac surgery (Higginson et al., 1992; Jackson et al., 1999; Naylor et al., 1995, Singh et al., 1999). In the national waiting list statistics of the Department of Health in the UK, waiting times for in-patient hospital services are defined as starting with the “decision to admit” date when the patient is placed on the in-patient waiting list (Dept of Health, 1997 a-c).

In selected cases, alternative points in the course of care have been used to mark the start of the hospital waiting time. Where there are several steps in the treatment process, the date of the pre-operative procedure can be used to mark the start of the waiting time for surgery. For example, investigators in Ontario defined the start of the waiting period for coronary artery bypass graft surgery as the date of angiography (Naylor, 1994). Similarly, the date of angiography was also used to mark the starting time in a study investigating waiting times for angioplasty in Ireland (Gaffney & Kee, 1995).

2.2.3 Total Waiting Time

Finally, some argue that the only true meaningful measure of waiting is the “total waiting” time to care. But as with other waiting times, there are differences regarding the start of the waiting period. Bloom and Fendrick (1987) were among the first investigators to introduce the concept of total waiting time in their study of waits for medical services in the UK. They argued that the total waiting period should begin when the patient “seeks care”, which in most cases, begins with the initial visit to the GP. Because information on total waiting time is often not recorded in a single database, Bloom and Fendrick used a combination of hospital administrative data, which provided in-patient waiting times, and physician survey data which provided information on waiting times for primary and specialist consultations. The data were aggregated to produce an estimate of the total waiting time for medical services (Bloom & Fendrick, 1987).

Similarly, the BCMA identified four distinct patient waits (some of which have been discussed): (1) wait for a GP appointment; (2) wait for a specialist appointment; (3) wait for diagnostic tests (if necessary); and (4) wait for in-patient treatment. The Association argued that the most accurate representation of patient waiting is “total waiting time”, an aggregate measure of all four waiting periods (BCMA, 1998).

In the UK, concerns were raised that the routinely reported hospital waiting time did not accurately reflect the total waiting time experienced by patients. In a study investigating the validity of waiting time, Smith (1994) compared the waiting time as recorded in the hospital administrative data (i.e. booking date to date of surgery) to the “post-referral” waiting time, defined as the time between GP referral for a specialist to hospital admission. The results clearly indicated that the hospital waiting time represented only approximately half of the total time patients waited from GP referral to receipt of care. The author concluded, therefore, that the total waiting time beginning with the GP referral more accurately reflects the waiting experiences of patients (Smith, 1994).

Despite the range of types and definitions of waiting times identified in the literature, there appears to be a degree of consistency. As illustrated in Table 1, investigators have focussed on three main waiting periods, namely, the wait for specialist consultation, hospital waiting times and total waiting times. For each type, there appear to be a small number of widely used decision rules regarding the start of the a wait, including the date of the GP referral, decision to treat, and placement on the hospital waiting list. This information serves as a good foundation upon which to lay the groundwork for recommending standard definitions for waiting times in Canada.

2.3 Measuring Waiting Times

In addition to a range of definitions of waiting times, there are also various methods currently used to measure and report waiting times. This section reviews these and briefly discusses issues concerning the reliability and comparability of alternative measurement decisions as well as circumstances under which each measure might be most appropriately used.

2.3.1 Measures

The majority of studies and reports on waiting times are descriptive in nature and provide basic information regarding the length of time patients have waited or are currently waiting for medical care. Waiting times are presented as aggregate measures representing the waiting times for a specific procedure or specialty group at the physician, hospital, regional or national levels. A review of various waiting time studies and reports reveal several key characteristics of waiting list data that should guide the selection of methods to ensure that they accurately and appropriately represent the true waiting time.

Measures of central tendency, such as means and medians, are commonly used to report waiting times. The choice of measure depends in part on the distribution of the data; averages or means, for example, are only valid if the data are normally distributed. A comprehensive review of waiting list studies indicates that the distribution of waiting list data tends to be skewed, most often demonstrating a positive skew reflecting a relatively small number of very long waits (Sanmartin et al., 1998). In such cases, an average or mean measure of waiting times would not be the most appropriate measure. The median waiting time, as an indication of how long an “average” patient could expect to wait or has waited is less sensitive to extreme scores. Alternatively, outlier cases can be removed to normalize an otherwise skewed distribution and then, a mean can be appropriately calculated. This may, however, result in the loss of valuable information regarding excessive waits. It is for this reason, that medians are most often used to report waiting times. Summary reports of waiting times using pre-determined categories of waits (e.g. < 3months, 3-6 months, >6 months etc) can also be used. The proportion of patients representing each category can provide some indication of the distribution of waits within a given population.

A review of waiting list studies also indicates that there is a considerable degree of intra-procedure variation in waiting times at the physician, hospital and regional levels (Sanmartin et al., 1998). In such circumstances, reporting any measures aggregated across such units of observation could hide important policy-relevant variation. The degree of intra-procedure variation, therefore, should be assessed before summary measures are presented.

2.3.2 Cross-Sectional Method

There are several methods currently used to calculate waiting times for medical care services, the most common of which are the cross-sectional, retrospective and cohort methods (Cottrell, 1980; Weaver, 1981; Williams et al., 1983; Don et al., 1987; Mordue, 1989). The cross-sectional method is perhaps the most commonly used. It represents the waiting times of patients currently waiting for care and as such, is a measurement of the time elapsed between when patients are placed on waiting lists to some defined cut-off point (e.g. last day of the month). This approach is commonly used with waiting list data available at the hospital, regional or national level.

For example, the UK has been collecting national waiting list statistics for several decades. National Health Service hospitals are required to report waiting list information to the Department of Health. The information is then collated at the national level and used to produce quarterly waiting time reports (i.e. March 31, June 30, September 30, December 31). The data are presented as the proportion of cases waiting for defined periods of time (e.g. 0-5 months, 6-11 months, 12-23 months, and 24+ months) (Department of Health, 1997).

Another example of cross-sectional measures of waiting times is provided in BC's Surgical Waitlist Registry. The data represent all patients waiting medical services at participating hospitals. Median waiting times are available for selected procedure and specialty groups by hospital and by physician as of the most recent cut-off date (i.e. September 30, 2000). This information is directly available to patient via the Internet (<http://www.swl.hlth.gov.bc.ca/swl>).

Cross-sectional measures provide a "snap-shot" of how long patients on a list have been waiting at a particular point in time. They can, therefore, be effectively used to provide up-to-date information regarding waiting times for patients currently on waiting lists. Such snap-shots can be taken at regular intervals (e.g. monthly, quarterly, semi-annually) to compare waits across physicians, hospitals or regions, and track changes in waits over time. The ability to measure waiting times cross-sectionally, however, depends on the availability of real-time waiting list data collected in a standard manner and comparable within and across hospitals and/or regions.

Evidence suggests that measures based on cross-sectional data may be susceptible to capturing excessive waits since there is a higher probability of capturing a long versus shorter wait. Longer waits may be the result of several factors including mismanagement of the waiting list (Don et al., 1987; Mordue et al., 1989). For example, patients showing excessively long waits may have already received care but still remain on the waiting list. Evidence from the published literature, originating primarily from the UK, suggests that waiting lists may be inflated by up to 30% (Sanmartin et al, 1998).

2.3.3 Retrospective Method

Retrospective measures of waiting times have also been frequently used in the literature. They represent the waiting experiences of patients who have received treatment and as such, reflect the completed waiting time between some initial point (e.g. "decision to treat" or booking of service) and the time of treatment. Waiting list information can be used to calculate the waiting times of patients who have been removed from the list. This is routinely reported, for example, in the UK using the national waiting list data. In Ontario, the Cardiac Care Network provides waiting time information for all completed heart-surgery cases. Information regarding the average number of cases performed per month over a three month period and the average waiting times are routinely updated and provided on the Internet (www.ccn.on.ca). Surveys have also been used to ask patients how long they waited for various services such as a specialist consultation or surgery (Ho et al. 1994; Coyte et al., 1994).

In the absence of real-time waiting list information, retrospective methods using administrative health data have been used to estimate the waiting times of patients who received care. In Nova Scotia and Manitoba, hospital and physician contact records were linked and used to estimate waiting times for patients who received selected procedures within a defined period of time. Hospital administrative data were used to identify recipients of surgery, including cataract, knee replacement, hip replacement and cardiac surgery. Physician claims data were used to identify the last pre-surgical consultation, which was assumed to be the point when the decision to treat was made. The waiting time was calculated as the interval between the date of the last pre-surgical consultation and date of surgery (Nova Scotia 1996; DeCoster et al., 1999).

Retrospective measures can also be used to provide information regarding the complete waiting time experienced by patients. They cannot, however, provide information on the waiting time of patients currently on the list. The most accurate retrospective measure would be based on real-time waiting time data collected using standard indicators to mark the start and end of the waiting period. Alternatively, administrative health data can also be used as described above to estimate the total waiting time retrospectively. This approach may slightly under-estimate the real waiting time experiences of patients since there is only a single point in the course of care used to estimate the start of the waiting time (i.e. last pre-surgical consultation). In reality, patients are placed on lists at various points during the course of care (e.g. after the first visit, during the course of care) since there are few standard guidelines that recommend when patients should be placed on the waiting list.

The time of placement on the list inevitably affects the total waiting time since patients placed on the list earlier in the course of care will experience longer waits compared to those placed closer to the date of surgery. Hence, there will be less variation in the distribution of waits when these are estimated using a single point of placement on the waiting list (e.g. last pre-surgical consult). In a recent study conducted using BC data, median estimates of total waiting times based on waiting list data versus administrative health data were compared. Retrospective estimates of completed waiting times calculated using the last pre-surgical consultation as the start of the waiting period were found to be shorter compared to the waits of patients removed from the waiting list for knee replacement (72 days vs 103 days), hip replacement (64 days vs 72 days) and cataract surgery (48 days vs 56 days) (Sanmartin, 2000). This particular retrospective method is perhaps best suited to procedures that require few pre-surgical consultations.

2.3.4 Cohort Method

Finally, the cohort method can be used to follow patients from the time they are placed on the waiting list until they are removed. While this may result in the most valid and reliable measure of waiting time, it is considered the most costly and time consuming since an established waiting list management process is required to identify when patients are placed on the list and regular monitoring is required to identify when they are removed. As such, this measure is not commonly used.

The cohort approach is selectively used in prospective studies focussed on, for example, the effects of waiting on patient experiences and treatment outcomes. The cohort study design is commonly used in epidemiology to study the effects of a defined exposure on the disease status of patients. Patients placed on the waiting list can be identified at the time of placement and followed over time until they are removed due to receipt of treatment or other reasons (e.g. death, treatment no longer required). Regular monitoring can be conducted to identify changes in clinical status over time and effects of waiting on the patient's quality of life.

The uses and strengths and weaknesses of the various approaches to patient selection (e.g. cross-sectionally, retrospectively, or by cohort) are presented in Table 2. The most appropriate measure depends in part on the type of information sought (i.e. current waits vs completed waits) and the availability of data (i.e. waiting list data vs. administrative health data). Regardless of the type of method used, standard definitions for waiting times are required to ensure that such

measures are accurately interpreted and comparable across jurisdictions and within and across specialty groups.

3.0 IDENTIFYING WAITING TIMES: A “PATHS TO CARE” APPROACH

The discussion and review have shown clearly the range of definitions and measures used to report waiting times for medical services in Canada and abroad. While many of these methods may be appropriate for the procedures and circumstances within which they are delivered, their variability represents a problem when there is a need to aggregate and/or compare this information across jurisdictions, procedures and specialty groups. In short, a set of standard definitions for waiting times would have considerable utility. A comprehensive understanding of the “standard” paths to care can provide valuable information regarding the potential waiting periods facing patients as well as highlight the key processes or milestones in the course of care that may serve to define the start and end of each waiting period.

Paths to care were developed for the procedures for which priority scoring systems were under development by the WCWL Project: surgery (i.e. general surgery, knee and hip replacement and cataract surgery), MRI examinations, and children’s mental health (CMH). The initial paths to care were developed based on information from the literature review and from preliminary discussions with selected members of the WCWL clinical panels. They were then distributed to all clinical panel members for review (n=61). Responses were submitted from 24 panel members (40%). Revisions were made based on the recommendations and suggestions of the panel members. The final paths to care are presented in Figures 1-4.

3.1 Waits for General Surgery, Knee and Hip Replacement and Cataract Surgery

Given the similarities in the paths to care for general surgery, knee and hip replacement, and cataract surgery, a single path was developed to represent the waiting times to surgery. Figure 1 illustrates the path and relevant waiting times.

Wait #1: Waiting Time to Primary Care

Most patients seeking non-emergency care will, in most instances, first contact their primary care practitioner for a consultation. The first waiting period likely experienced by patients on their path to care, therefore, is the waiting time for their general or family practitioner (GP/FP). This waiting period can be defined as: **the time between the date of booking to the date of the consultation.**

<p>WAIT #1</p> <p>WT to Primary Care= Date of request for consultation to Date of Primary Care Consultation</p>
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Wait#2: Waiting Time to Initial Specialist/Surgical Consultation

Once the initial primary care consultation has been conducted, the physician may recommend a consultation with a medical or surgical specialist. In such cases, a second wait may occur between the time of the GP/FP visit and the specialist consultation. A formal request for a

consultation is made by the office of the GP/FP on the patient's behalf. Referrals may be made via a phone call or letter. The waiting period, therefore, can be defined as: **time between the GP/FP referral and the date of the specialist consultation.**

In the case of cataract surgery, referrals to the ophthalmologist may be made through several different paths. Like other specialist referrals, patients may be referred directly by their GP/FP. Alternatively, patients may choose to access an optometrist directly since a physician referral is not always required. Following the consultation, the optometrist may recommend a referral to the ophthalmologist if medically necessary. The waiting time for the ophthalmologist, therefore, begins when the optometrist refers the patient for further consultation.

WAIT #2
WT to Initial Specialist/Surgical Consultation =
Date of Primary Care referral (or alternate) to
Date of first Specialist/Surgical Consultation

Wait #3: Waiting Time to the Decision to Treat

Following the initial specialist/surgical consultation, patients embark on various paths toward the decision to treat defined here as the point in time when both the physician and patient agree that treatment is necessary and desirable. For some patients, there will be no waiting time since the decision to treat can be made at the initial consultation. This is often the case for patients requiring orthopaedic surgery, for example, where the decision to replace a knee or hip can often be made during the first consultation with the orthopaedic surgeon. Alternatively, some patients will require more than one visit with the specialist/surgeon before a decision to treat can be made. This may occur, for example, in cases where the first consultation occurs in the early stages of the disease and a "wait and see" approach is adopted to monitor the patient's condition over time through subsequent consultation(s). A decision to treat may be made later in the course of care, if deemed necessary and desirable, perhaps during the last pre-surgical consultation. However, the time lapse between the first and final pre-surgical consultation cannot, in such circumstances, be considered a "waiting time" (in the traditional sense) since prior to a decision to treat, there is no treatment for which the patient is waiting. In some cases, however, patients are placed on waiting lists early in the course of care, often in anticipation of future need for treatment when they would potentially be facing lengthy waits. In such cases, it is assumed that the patient will require treatment once they reach the top of the queue. Waiting times for these cases will appear as exceedingly long waits compared to those experienced by patients who are placed on the list immediately following the decision to treat.

Wait #3a: Waiting Time to Diagnostic Tests

Diagnostic tests are often required to make or confirm diagnoses and/or treatment decisions. The route to care will likely vary depending on the nature of the test and the jurisdiction within which it is provided. In some cases, only specialists may make requests for diagnostic tests while in other jurisdictions they may be requested by GP/FPs. The waiting time for diagnostic tests, therefore, can be generally defined as **the interval between the date of request for a test and**

the date on which the test is performed. (Note: A more detailed description of waiting times for MRI is provided below).

$$\text{WAIT \#3a:}$$
$$\text{WT to Diagnostic Tests = Date of request for test to}$$
$$\text{Date of Test}$$

Wait #3b: Waiting Time to Subsequent Specialist/Surgical Consultation(s)

Patients with more complex diagnoses may be referred to a second specialist or surgeon for further consultation before a decision to treat can be made. For example, patients requiring surgical treatment may be referred to the surgeon following an initial specialist consultation. In such cases, patients may be facing a subsequent specialist consultation waiting time defined as: **the time between the referral date from the first specialist to the date of the subsequent specialist/surgical consultation.** It is important to identify and track the waiting periods for each specialist consultation separately to ensure that the appropriate start point for the waiting time is used.

Consider, for example, two scenarios involving waits for a surgical consultation. Patient A is referred directly to the general surgeon by the GP/FP and will therefore, experience a waiting time for the “first specialist consultation” defined as commencing with the GP/FP referral. Patient B, however, is referred by their GP/FP to an internal medicine specialist for a consultation and is then referred by the internist to the general surgeon. Patient B would experience a longer waiting time for that surgical consultation if the same definition is applied since it includes the “first specialist consultation” waiting time for the internist as well as the “subsequent specialist” waiting time for the general surgeon. A valid comparison of the waiting times for a general surgical consultation for these two patients can only be made if the “first specialist consult” waiting time for Patient A is compared to the “subsequent specialist” waiting time for Patient B. It is important, therefore, to identify patients who experience more than one specialist or surgical consultation and track each waiting time separately. Given a comprehensive source of data, these waiting times can be aggregated to provide information regarding the total amount of time patients wait for specialist care as well as to compare waiting times across patients with similar paths.

$$\text{WAIT \#3b}$$
$$\text{WT to Subsequent Specialist/Surgical Consultation =}$$
$$\text{Date of referral to}$$
$$\text{Date of Specialist/Surgical Consultation}$$

Wait #4: Waiting Time to Surgery

Once the decision to treat has been made, patients will likely face a final waiting time for surgery. As noted in the literature and in the path to care, this waiting time may begin at one of two points in time, at decision to treat, or at hospital “booking” time. For the former, the last pre-surgical consultation with the specialist or surgeon is commonly assumed to be the point in time when the decision to treat is made, as discussed above. The surgical waiting time, therefore, may be defined as **the time between the date of the decision to treat and the date of surgery**. As noted previously, this definition is commonly used when, in the absence of real-time waiting list data, alternative health data are used to retrospectively measure waiting times.

Alternatively, the surgical waiting time may begin when the patient is booked for surgery. Following the decision to treat, the surgeon must notify the hospital or clinic and request a booking date for the patient. This often results in the placement of the patient on the hospital waiting list. The surgical waiting time, therefore, may alternatively be defined as **the time between the date of placement on the hospital waiting list and the date of surgery**. This definition is commonly used in jurisdictions where real-time waiting list data are maintained at the hospital. This measure does not, however, capture the elapsed time between the decision to treat and placement on the hospital waiting list. In most cases, this waiting time is likely to be negligible if physicians request bookings immediately following the treatment decision. However, they may choose to delay this request for various reasons. For example, in many hospitals, physicians are assigned a block of operating suite time to be used at their discretion. Physicians may choose, therefore, to place the patient on the hospital waiting list once a confirmed date for surgery has been obtained. Although the patient has been waiting for surgery since the initial decision to treat was made, their “official” waiting time, as calculated using the booking date, will be significantly shorter. The validity of this definition, therefore, is dependent in part on the processes and strategies used by physicians to place patients on the hospital waiting list.

<p style="text-align: center;">WAIT #4: WT to Surgery = Date of decision to treat to Date of surgery OR WT to Surgery = Date of placement on hospital WL to Date of surgery</p>
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3.2 Wait for MRI Examinations

The path to care and corresponding waiting times for MRI are presented in Figure 2. The route to an MRI examinations, like other diagnostic tests, will depend in part on the jurisdictional policies that determine access to these services. In many cases, patients referred for MRI examinations may experience similar waits to those discussed for surgery, namely waits for GP/FP consultations (Wait #1) and for initial specialist consultation (Wait #2). The same definitions are applied to these waits and therefore, do not require further discussion. The focus, therefore, will be on the specific waits for MRIs (Waits 3a). The waits are numbered in a manner consistent with those applied to the waits for surgery since some patients may require an MRI prior to surgery.

In many jurisdictions, MRI examinations can be requested only by specialists. There are some jurisdictions, however, that will accept requests from GP/FPs. Requests made by either specialists or GP/FPs are made directly by the physician's office to the hospital radiology department or radiology clinic. The first possible waiting period, therefore, is **the time between the request for an MRI and when the request is accepted by the radiologist**. In many cases, this waiting period may be negligible if requests are delivered in a timely manner. However, given the lack of standard processes within and across jurisdictions, we cannot say whether or to what extent this is the case in all areas.

The more significant waiting period for MRI examinations occurs after the request has been received by the radiologist. Once received, the request is reviewed by the radiologist who will determine the urgency of the case and prioritize patients accordingly. This prioritization decision is often made through consultation with the referring specialist and may be highly iterative. The waiting time, therefore, may be defined as **the time between when the request for an MRI has been accepted by the radiology department or MRI clinic and the date of the MRI examination**. This definition is commonly used among radiology departments where, as a matter of procedure, the request is date stamped when received.

<p>WAIT #3a</p> <p>WT to Receipt of MRI Request = Date of request for MRI to Date request is accepted by the radiologist AND WT to MRI = Date request is accepted to by the radiologist Date of MRI examination</p> <p>OR WT to MRI = Date of request for MRI to Date of MRI examination</p>
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Alternatively, the two waiting periods can be combined in the following definition for MRI waits: **the time between the date of request for an MRI examination and the date of the examination**. This definition may be appropriate in jurisdictions where standard request forms are used that provide a referral date. This latter definition more accurately reflects the waiting time experienced by patients requiring an MRI. Regular monitoring could be conducted to ensure that the waiting time between the request for service and receipt of the request is minimized.

3.3 Wait for Children's Mental Health (CMH) Services

Establishing standard definitions of waiting times for CMH services is somewhat more complex given the degree of variation in the delivery of services and patient experiences in different

mental health systems. Hence, two paths to care are presented in Figures 3 and 4 representing patient experiences in two different jurisdictions recognizing that the experiences and waits may vary in other areas. Despite these differences, there is some agreement regarding the likely waits for care experienced by children and adolescents seeking mental health services.

Wait #1: Waiting Time to Primary Care or Pediatric Consultation

Children and adolescents seeking mental health services may access the system via a parental request or may be recommended for an assessment by representatives of the school system, legal services (i.e. police, legal aid), protection services (i.e. children’s welfare, social worker) or other community groups. The first course of action is a consultation with either their GP/FP or a pediatrician for an initial mental health assessment. The first waiting period, therefore, occurs between **the date of the initial request for a primary care or pediatric consultation and the date of the consultation.**

<p>WAIT #1</p> <p>WT to Primacy Care or Pediatric Consultation = Date of request for Consultation to Date of Assessment</p>

Wait #2: Waiting Time to Community Mental Health Assessment

Mental health assessments are also provided in various community mental health clinics and agencies by trained mental health workers as well as other agencies such as neurodevelopmental clinics. Children and adolescents may access these services through several different paths. First, parents and youth seeking help may request services directly from a community mental health agency. Second, following an initial physician assessment, patients who require more intensive care may be referred to a community mental health agency or clinic for further assessment. Alternatively, the referral may be made directly by other parties such as school representatives, police, or social workers. In all cases, the waiting period may be defined as **the time between the date of referral to the community health clinic or agency and the assessment date.**

<p>WAIT #2</p> <p>WT to Community Mental Health Assessment = Date of Referral to Date of Assessment</p>
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Wait #3: Waiting Time to Psychiatric Consultation

Depending on the nature and severity of the case, children and adolescents may require a psychiatric examination. Once again, there are several routes or paths that may be taken in this

course of care. Following their initial mental health assessment, patients may be referred to a psychiatrist by their primary care physician or pediatrician or by a community health agency or clinic. The fourth waiting period, therefore, may be defined as **the time between the referral to the psychiatrist and the date of the psychiatric consult.**

WAIT #3

**WT to Psychiatric Consultation =
Date of referral to Date of Consultation**

Wait #4: Waiting Time to In-patient Mental Health Services

Once the appropriate assessments have been conducted, decisions must be made regarding the appropriate course of care. One of the options for cases requiring more intensive treatment is in-patient care. Depending on the severity of the illness, patients may be admitted to hospital on either an elective or emergency basis. Elective patients will likely experience a waiting time prior to admission. The fourth possible waiting period, therefore, is defined as **the time between the request for admission or booking and the date of admission to hospital.**

WAIT #4

**WT to In-patient Services =
Date of request for admission to Date of Admission**

Wait #5: Waiting Time to Out-patient/Community Mental Health Services

Alternatively, children and adolescents may be treated on an out-patient basis. Once again, patients will likely face a waiting time prior to the start of their treatment programs. In such cases, the waiting time can be defined as **the time between the date of referral for out-patient services and the date of the first out-patient treatment visit.**

WAIT #5

**WT to Out-patient Services =
Date of referral for Out-patient Services to
Date of first out-patient visit**

Wait #6: Waiting Time to Follow-up Services

Finally, follow-up services may be required for patients discharged from either in-patient or out-patient treatment centers. Follow-up services may be provided in various settings including community mental health clinics and out-patient services. The final waiting period, therefore,

can be defined as **the time between the request for out-patient follow-up services and the date of the first follow-up visit.**

WAIT #6

**WT to Follow-up services =
Date of request for services to Date of First Visit.**

4.0 ISSUES and CHALLENGES IN SETTING STANDARDS FOR WAITING TIME DEFINITIONS

The development of patient paths to care and the identification of possible waits faced by patients represent just the first stage in the establishment of standard definitions for waiting times. Building consensus around a core set of definitions and ultimately implementing those definitions will likely be the goal of subsequent activities in this area. In the final section of this report, the focus will be placed on key issues and challenges facing those who will take the next steps toward establishing of standard definitions for waiting times.

4.1 Validity and Reliability of Waiting Time Definitions and Measures

The development of standard definitions and measures of waiting time would not be complete without some consideration of their validity and reliability. The standard definitions ultimately agreed on must accurately reflect the experiences of both health care providers and patients. A degree of “face” validity is required among practitioners to ensure that the definitions are meaningful and accurately reflect the practices and processes in the delivery of care. This has been achieved to some extent through the participation of the WCWL Panel members in the development of the paths to care and the identification of the relevant patient waiting times.

Furthermore, the waiting times must also achieve a degree of construct validity. Construct validity is concerned with the degree to which a measure accurately reflects all the dimensions or constructs of the phenomenon in question. The range of waiting times identified for each type of service, therefore, must accurately and comprehensively represent the waiting experiences of patients. Once again, the participation of clinicians familiar with the course of care experienced by their patients will have contributed to the construct validity of these measures. However, patient participation in this process will be critical to ensure that all relevant patient waiting times have been identified.

The definitions and measures should be generalizable both within and across specialty and procedure groups. Patients waiting for different services and procedures are likely to face similar waiting periods. This was clearly evident in the case of patients waiting for general surgery, hip and knee replacements and cataract surgery. Most of these patients will likely experience waits for their GP/FP visit, initial specialist consultation and finally, surgery. It would be advantageous, for several reasons, to adopt and apply the same definitions for waiting times across similar waiting experiences. The use of standard definitions for waiting times, such as

initial specialist consultations and surgery will simplify the collection and management of waiting list data within and across specialties. Furthermore, this approach will improve the comparability of waiting time information within and across procedures as well as within and across physicians, hospitals and jurisdictions.

4.2 Data Availability and Standard Procedures in the Health Care System

The ability to implement standard definitions for waiting times and accurately measure and compare waits within and across jurisdictions will depend, in part, on the availability of data and the use of standard procedures in the delivery of care. The issues and challenges regarding data availability vary to some extent depending on whether waiting times are measured cross-sectionally using waiting list information or retrospectively using alternative health administrative data.

“Real-time” Waiting List Data

“Real-time” information is most commonly available at the hospital level for surgical procedures but its availability varies by procedure, hospital and jurisdiction. As previously discussed, the BC Ministry of Health, for example, provides waiting time information at the provincial level through the Surgical Wait List Registry for a broad range of services. In Ontario, waiting time information for cardiac services is provided at the provincial level through the Cardiac Care Network. In many other provinces, waiting list information exists primarily at the hospital level. In a recent survey of hospitals and cancer agencies across the country, availability of waiting list data varied by procedure and institution. Approximately 80% of the cancer agencies responding to the survey (n=16) indicated that they maintained waiting list information for radiation oncology and consultations with the radiation oncologist. Among those hospitals responding to the survey (n=77), less than 60% collected waiting list data for services such as MRI, hip and knee replacements, and cataract surgeries. Fewer hospitals maintained waiting time data for specialist consultations such as ophthalmologists (30%) and orthopedic surgeons (25%). The majority of hospitals rate the standardization of the information as only fair to good (McDonald et al., 1998). This survey represents one of the few comprehensive efforts to determine the level of availability of waiting list information in hospitals across the country. Information regarding the current availability of waiting list data provides some insight regarding the level of readiness to introduce standard definitions and measures. In some cases, this may be done by building and modifying the existing information systems while in other hospitals and jurisdictions, the implementation process will likely involve the establishment of real-time waiting list data information systems.

Real-time waiting information for primary care and specialist consultations is less available at the provincial, regional or even hospital level. Waiting time information for specialist consultations, for example, has been provided by various organizations including the Fraser Institute and the BCMA, but the reports are based on physician surveys. “Real-time” waiting list information for physician consultations exists primarily at the physician level and for this reason, it is difficult to assess its availability or the level of standardization. Given the proposed definitions for GP/FP and specialist consultations, for example, the first step in the implementation of standard definitions and measures might focus on the processes and procedures used to deliver care. Specifically, those processes used to refer patients from one level of care to another. Currently, various methods are used to refer patients for different

services; in the mental health systems, for example, children and adolescents may be referred for psychiatric consultations or community mental health assessments via phone, mail, fax or in some cases, e-mail. The nature and quality of the information likely varies depending on the process used. For example, the date of referral will likely be included in a letter but may not be captured if the patient is referred by phone. This type of information will be critical for the implementation of standard definitions for waits for specialist consultations. Hence, the introduction of standard referral processes for specialists and diagnostic tests with a minimum standard for data capture may represent the first step in the establishment of standard definitions for waiting periods for these services.

Retrospective Waiting Time Information

As previously discussed, waiting time information can be obtained retrospectively using alternative health administrative data sources, however, the ability to do so will depend on the nature and quality of the information available in various sources of health information such as hospital separations and physicians' claims data. There is a particular concern regarding the use of physician claims' data where the availability and quality of the information varies across and within provinces since the data collection process is a provincial responsibility.

The quality and accuracy of the data may also vary within jurisdictions. In BC, for example, the Medical Service Plan (MSP) data represents all physicians' claims reimbursed on a fee-for-service basis. The data include referral information representing the physician by whom or to whom the patient was referred. In the consultation claims submitted by GP/FPs, the referring practitioner number is that of the specialist to whom the patient was referred. In the consultation claims submitted by specialists, the referring practitioner number is that of the referring physician, most often a GP/FP. Theoretically, therefore, the waiting time to the patient's initial specialist consultation can be obtained retrospectively by linking the GP/FP and specialist consultation claims with matching referral information. This can be accomplished, in part, if the referral information is valid and reliable across GP/FPs and specialists. The referral information on the specialist claims tends to be highly reliable since the specialist must report the referring physician in order to receive payment. This is not the case for GP/FPs and therefore, the information regarding to whom the patient is referred is often missing. Since both the date of the referral and the date of the consultation are required to calculate the waiting time to the initial specialist consultation, the ability to do is compromised by the missing information. Alternative methods could be used to identify the date of the GP/FP referral, such as last GP/FP visit prior to the first specialist consultation.

The range of services covered by provincial medical plans will also affect the region's ability to retrospectively measure waiting times. In Alberta, for example, optometrist services are not covered by the provincial medical insurance plan. Hence, referrals from optometrists to ophthalmologists would be impossible to track using claims data rendering it difficult to retrospectively measure the waiting time to the initial specialist/surgical consultation for those patients referred by optometrists. The development of methods to retrospectively calculate waiting times using standard definitions, therefore, must consider the availability and quality of health administrative data.

4.3 Total Waiting Times and Path Variation

One of the key definitions identified in the literature was the “total” patient waiting time representing the wait from the initial request for care to treatment. The waiting periods identified in the various paths to care have, to this point, been discussed and treated as separate events. Given the availability of waiting time data, the waiting times could be aggregated to provide a measure of the total waiting time experienced by patients. However, to ensure the accurate measure and comparability of total waits, the issue of path variations must be addressed.

As highlighted in previous discussions, patients waiting for the same treatment may embark on different paths to care that may affect their waiting times. Consider for example, two surgical patients who both require MRI examinations to confirm their diagnoses. The first patient resides in a jurisdiction where radiology departments will only accept requests for MRIs from specialists. Their path to care, therefore, will likely involve a series of consecutive waiting periods beginning with a wait to see their GP/FP followed by the initial specialist waiting time at which point the request for the MRI examination will be made. The patient will then have to wait for the MRI examination to be conducted and the results provided to their surgeon before a decision to treat can be made. The second patient, however, resides in a jurisdiction that permits requests for MRIs from GP/FPs. Like the first patient, a waiting period will likely occur prior to the primary care consultation. However, at this time, the GP/FP can request the MRI examination as well as refer the patient to the specialist. The patient, therefore, experiences two waiting periods, the initial specialist consultation and the diagnostic test waiting times, concurrently rather than consecutively. While this may not make any difference when the individual waiting times are compared between the two patients (provided that waiting times for MRI are not affected by the status of the referring physician), it will make a difference to the total waiting time experienced by each patient. It is imperative, therefore, to ensure that the methods used to calculate and compare total waiting times are sensitive to the differences patients experience in their paths to care.

4.4 Practice Guidelines

The focus of the discussion to this point has been on the identification of waiting times and the issues concerning when the waiting period might begin. Given the primary purpose of the paper, this is an appropriate strategy. However, it is time to take a step back and consider the issue of whether or not patients *should* be placed on the waiting list. While the decision-points regarding the appropriate course of care and treatment are recognized in the proposed paths to care, there has been no discussion regarding the criteria used to make these decisions. In most studies, the issue of waiting for care really only begins when the patients are placed on the list and there is little to no discussion regarding whether or not the patient should have been placed on the list in the first place.

The availability of standard criteria used to guide these decisions will vary by specialty and procedure. In some cases, clinical guidelines have been established to outline the specific criteria to determine if and when patients should be treated. For example, in the case of cataract surgery, the Cataract Management Guideline Panel of the Agency for Health Care Policy and Research recommends that cataract extraction is indicated for patients with 20/50 visual acuity or worse and who experience disability as a result for their impaired vision (O’Day, 1993). In theory, therefore, patients should not be placed on the waiting list unless they meet these

treatment criteria. The existence of such criteria, however, may reduce but will likely not eliminate practice variation regarding patient placement on the waiting list since ultimately, the decision to treat and when to treat remains with the physician and patient.

There are many cases, however, where such guidelines do not exist as was discovered during reviews of the practice guidelines for treatment of breast and colorectal cancer conducted for the WCWL Project. Although these guidelines provide information regarding how to treat cancer patients, they do not indicate *when*, during the course of the disease, surgery or adjuvant therapy should be initiated (Banchy et al., 2000; Martin et al., 2000). In the absence of established criteria, therefore, the decision of when to treat rests solely with the individual physician and patient. This is likely to lead to a high degree of variation regarding if and when patients are placed on the waiting list for treatment which will affect the length of patient waits and the comparability of waiting time data at various levels.

4.5 Implementation Process: Some Key Features

The establishment of standard and universally accepted definitions for waiting times can only be achieved through a process that focuses on consensus building among key stakeholder groups, a process similar to that adopted by the WCWL Project. The strategies and methods adopted to achieve consensus will likely face various issues and challenges such as the scope of the process, and the perspectives of key stakeholders. The international experiences in waiting list policy development may offer some insight regarding the key decisions, issues and challenges that may be faced here in Canada.

Scope

One of the key issues facing the establishment of standard definitions for waiting times will be to determine the scope of the process: should the process be national or remain regional? Should it focus on all services or a select type of service? Should it focus on all identified waiting times for those services or selected waiting times?

The international experiences suggest that waiting time definitions and policies can be established at the national level. In the UK, for example, waiting time definitions for all in-patient services have existed at the national level since the late 1980s. The Steering Group on Health Service Information was established in 1982 to consider issues and challenges regarding the collection and use of hospital information. The Committee recommended definitions and standards for the collection of waiting list data to guide NHS hospitals and regional authorities in their efforts to provide such information.

Waiting times have clearly become an issue within most provincial health care systems. Furthermore, groups across the country have expressed interest in reporting and comparing waiting time data across jurisdictions including several national organizations (McDonald et al, 1998). While interest may exist at the national level, the challenge will be to build consensus across health systems that vary in the processes and procedures used to deliver care as well as their interest in and availability of waiting list information.

The issue of which services and which waiting times to focus on will also be critical to this process. In Sweden, for example, waiting list policies were adopted at the national level for 12

procedures including hip and knee replacement, cataract and MRIs. The process, therefore, may involve the establishment of standard definitions for the five procedure groups selected by the WCWL project. Alternatively, the selection may be based on the nature or type of service with similar paths to care and waiting times. In the UK, for example, waiting time definitions are standardized at the national level for all in-patient and out-patient hospital services as well as for specialist consultations. The process may be expanded therefore, to consider definitions of waiting times for groups of services such as surgical services, diagnostic services, specialist consultations etc. The feasibility of such an approach will depend in part on the level of agreement across jurisdictions regarding the identification and coding of these services.

Key Stakeholders

The inclusion of key stakeholder groups will be critical to the establishment and implementation of standard definitions for waiting times. Waiting times are of interest to a broad range of groups including clinicians, health care managers, policy-makers and perhaps most importantly, patients. As was the practice with the WCWL Project, representatives from these various groups should be included in the process. The following key groups are identified as possible participants in this process:

- Physician Groups:
 - Clinicians;
 - Provincial and National Medical Associations;
 - Specialty Associations/Colleges
- Health Care Managers:
 - Hospital administrators;
 - Regional Health Authorities;
 - Community Health Care administrators
- Policy-makers:
 - Government representatives (Provincial and Federal);
 - National organizations
- Patients:
 - Patient representatives
 - Consumer groups
- Canadian Institute for Health Information (CIHI)
- Academic Community

Process Issues

The work of the WCWL project to date has clearly demonstrated that a consensus building process involving various stakeholder groups can work to address the issues of waiting lists and waiting times. The establishment of standard definitions is no exception. Once the scope of the process has been determined, the task of pushing forward work in this area could be designated to a task force or steering committee with representation from the above mentioned groups. This initiative may be part of a broader mandate for this group focussing either on waiting lists or complementary objectives. For example, in the UK, the issue of definition and data collection standards for waiting list data was addressed by a national committee mandated to investigate the broader issue of health information. The establishment of standard definitions, therefore, may

be just one of several objectives of such a group with others including the development of guidelines for waiting list data collection, reporting and the management of waiting lists.

The paths to care and recommended definitions of waiting times presented in this report may serve as the starting point for subsequent work in this area. Once approved by the WCWL project, this information can serve to potentially achieve consensus among a wider group of stakeholders across Canada. Perhaps the most significant obstacle facing such a process, however, is the desire to establish national standards for waiting time definitions in a country where health care is primarily a provincial jurisdiction. This has been achieved in the area of hospital information through the creation of HMRI and subsequently CIHI. CIHI has responsibility for standards development in health information, in collaboration with the Canadian Standards Association and could further develop preliminary thinking and recommendations of WCWL and use this as the basis for promulgation of standard waiting time definitions used for data collection, management, and research purposes.

5.0 CONCLUSIONS and RECOMMENDATIONS

The primary purpose of this report was to investigate and develop standard definitions for waiting times for select procedures including general surgery, knee and hip replacement, cataract surgery, MRI and children's mental health. Building on the available evidence and expertise of the WCWL panel members, paths to care were established as a means to identify all possible waiting times facing patients in their efforts to receive care. Standard definitions were then proposed for each waiting period identified in the path to care. The level of agreement within and among procedure groups varied. Similar waiting times and definitions were applicable across the range of surgical procedures considered. In the area of children's mental health, however, differences in the availability and delivery of service may affect the waiting times faced by patients.

Based on the findings of this report, the following recommendations are proposed:

- The process to establish standard definitions for waiting times should be national in scope ;
- The process should be supported by a newly established or existing structure (e.g.CIHI) that has the capacity to foster consensus among the relevant stakeholder groups;
- While a broad range of waiting times were identified in the report, efforts to establish standard definitions should focus initially on four key waiting periods:
 - waiting time for primary care consultation
 - waiting time for initial specialist consultation
 - waiting time for diagnostic tests
 - waiting time for surgery
- Standard definitions should be identified and adopted for similar waiting experiences within and across specialty and procedure groups (e.g. wait for initial specialist/surgical consultation, wait for surgery);

- Efforts to generate waiting time data should focus on the establishment and use of “real-time” waiting list information that can be used to track patients during the course of their waiting period.

This work represents the first step toward the establishment of standard definitions for waiting times for medical services. As noted, there will likely be several challenges and issues facing the implementation and operationalization of these standards. Concurrent efforts focussed on other issues such as the development of standard guidelines that focus on if and when patients should be placed on the waiting list as well as guidelines to standardize the collection of waiting list data, will go far to improve the availability and comparability of waiting list information in Canada.

Efforts to establish standard definitions for waiting times represent one of several strategies, including the development of prioritization tools, currently being developed to address the issue of waiting lists and waiting times in Canada. Together, these approaches clearly mark a shift toward the generation of valid and accurate information on waiting lists that can be used to establish effective long-term solutions.

Table 1.1: Review of Definitions of Waiting Time and Start of the Waiting Period

Waiting Time	Start of the Waiting Period				
	GP Visit	GP Referral to Specialist	Decision to treat/ Visit with Specialist	Placement on Hospital WL/ Booking	Other
Specialist Waiting Time	-Fordham, 1987 ¹ -BCMA, 1998 ^{4,5}	-Hochuli, 1987 ¹ -Ho et al., 1994(b) ¹ -Smith, 1994 ⁴ -Ramsay & Walker, 1994-1998 ^{4,5} -UK Dept of Health ^{4,5}			
In- and out-patient Waiting Time (Clinic/ Hospital)			-Fordham, 1987 ¹ -Ho et al., 1994(a)(b) ¹ -Coyte et al., 1994 ¹ -Hanning, 1996 ^{1,2,3} -DeCoster, 1994 ⁴ -Morgan et al., 1996 ⁴ -Ramsay & Walker, 1994-1998 ^{4,5} -Nova Scotia, 1996 ^{4,5}	-Williams et al., 1983 ¹ -Hadjistravropoulos, 1998 ² -Higginson et al., 1992 ³ -Jackson et al., 1999 ³ -Naylor et al., 1995 ³ -Singh et al., 1999 ³ -Clover et al., 1998 ⁴ -Smith, 1994 ⁴ -Jacobs & Hart, 1990 ^{4,5} -UK Dept of Health, 1992 ^{4,5} -BCMA, 1998 ^{4,5}	-Naylor, 1994 ² (pre-operative procedure) - Gaffney & Kee, 1995 ² (pre-operative procedure) -Afzelius et al., 1994 ⁶ (first specialist visit) -Banchy et al., 2000 ⁶ (clinical history) -Hamilton et al., 1996 ¹
Total Waiting Time	-Bloom & Fendrick, 1987 -BCMA, 1998 ^{4,5}	-Smith, 1994 -Ramsay & Walker, 1994-1998 ^{4,5}			

- Legend:
- 1: Orthopaedic surgery
 - 2: Cataract surgery
 - 3: Cardiac surgery
 - 4: Broad range of surgical procedures
 - 5: Diagnostic procedures
 - 6: Cancer care

Table 2: Methods to Measure Waiting Times

Method	Purpose	Measure of WT	Data Requirements	Advantages	Disadvantages
Cross-Sectional	-to provide a measure of the waiting time for all patients currently awaiting care	-time between date of placement on the waiting list and some defined point in time	-“real-time” waiting list data	-provides a measure of the current waiting time for services	-does not provide information regarding total waiting time
Retrospective	-to provide a measure of the total waiting for patients who received care	-time between placement on and date of removal from the waiting list	-“real-time” waiting list data -administrative health data -patient/physician surveys	-provides a measure of the completed WT	-does not provide information regarding current waits for services
Cohort	-to provide a measure of the total waiting time for patients identified and placed on the waiting list	-time between placement on and removal from the waiting list	-prospective data collection	-provide a highly accurate measure of the completed waiting time	-requires regular follow-up -costly and time consuming

Figure 1: Waiting Times for General Surgery, Hip and Knee Replacement, and Cataract Surgery

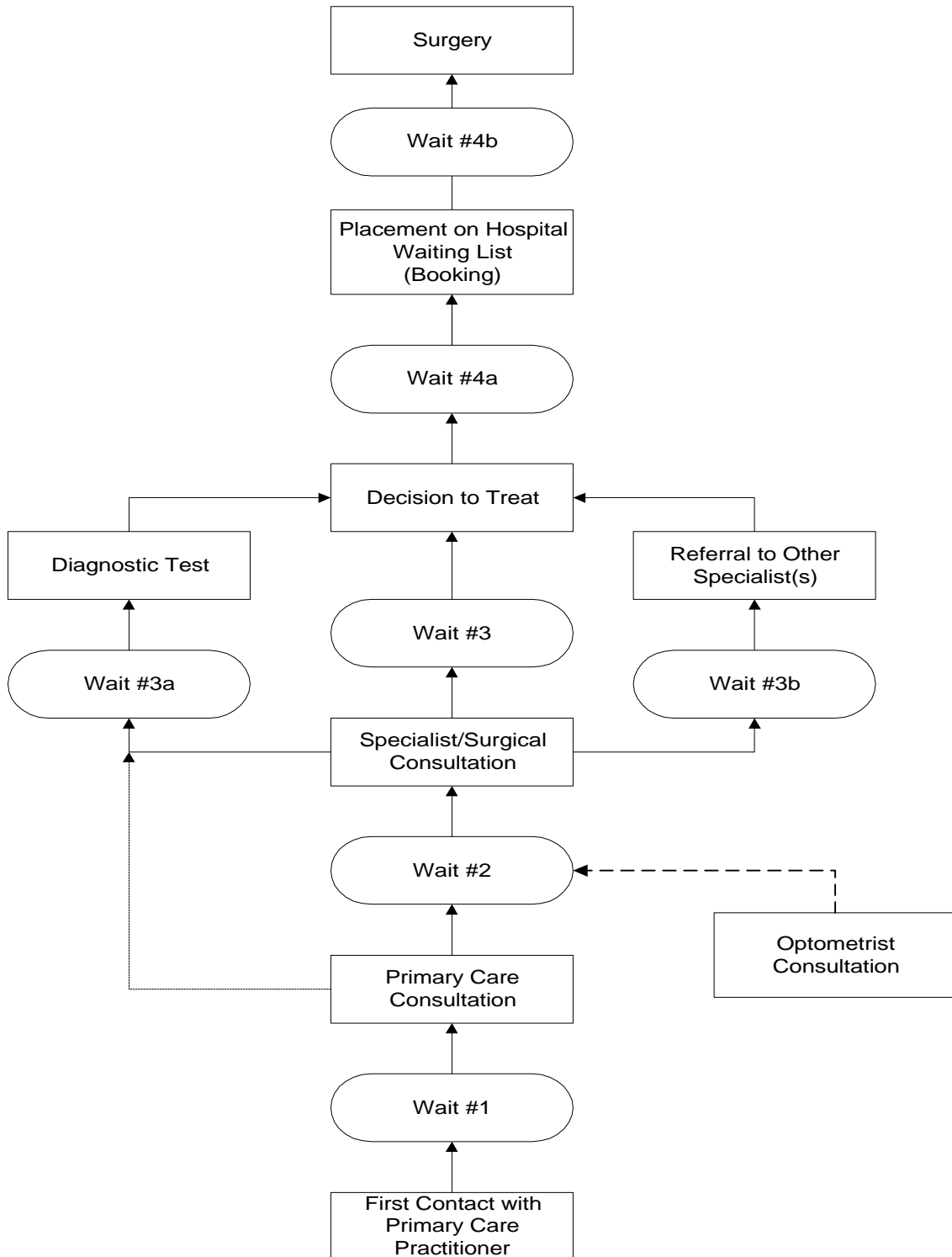


Figure 2: Waiting Times for MRI Examinations

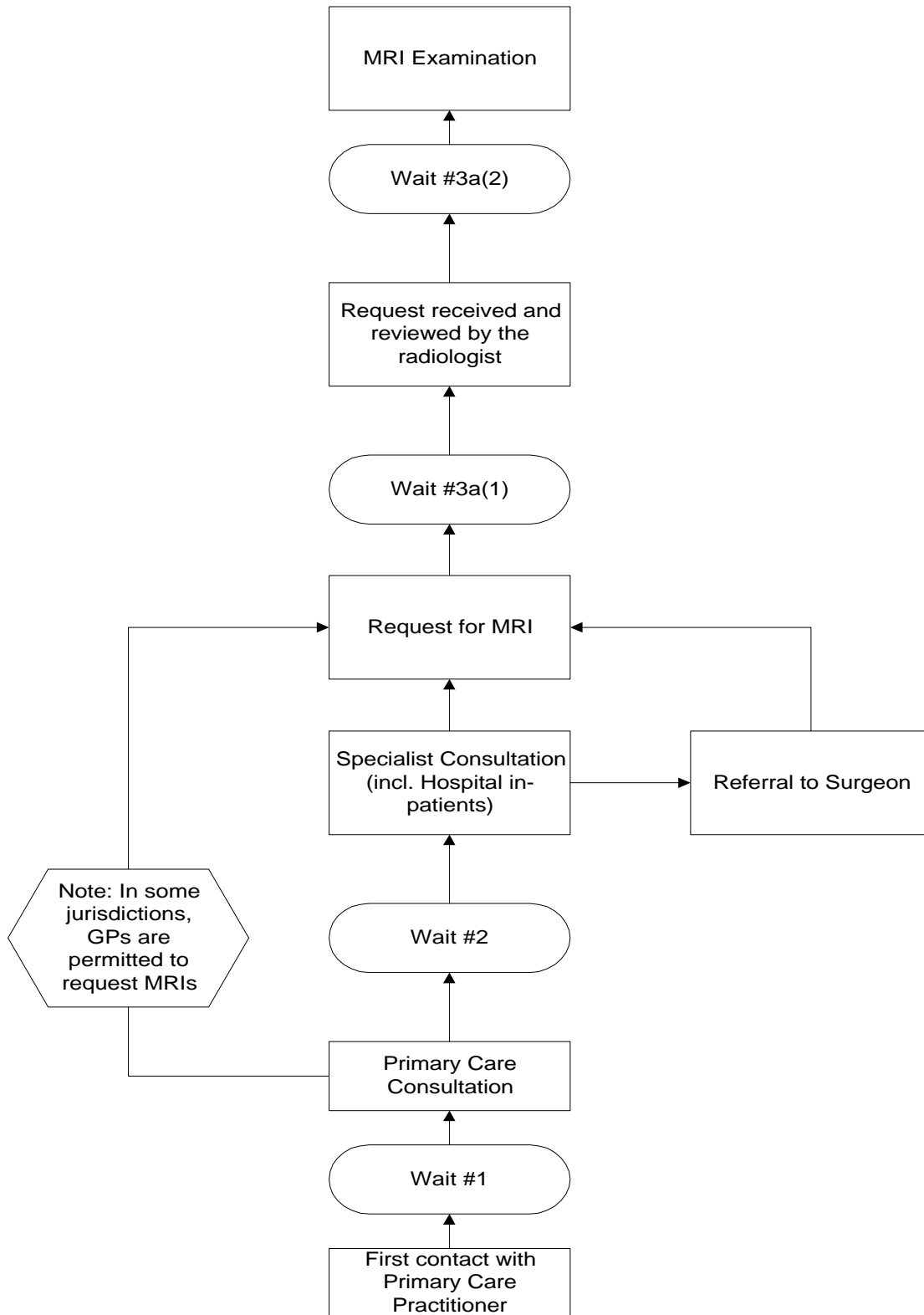


Figure 3: Waiting Times for Non-Emergency Child/Youth Mental Health Services

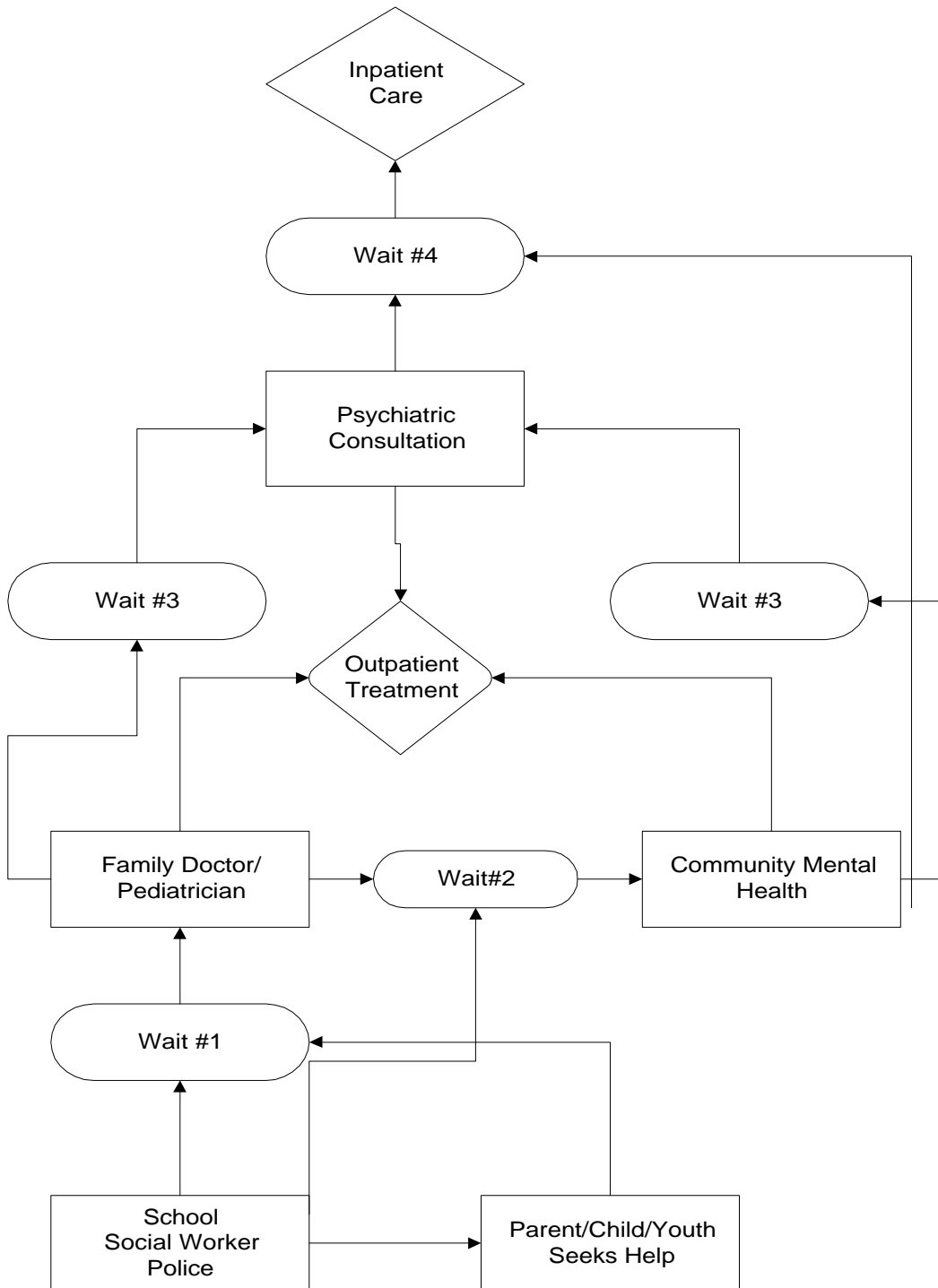
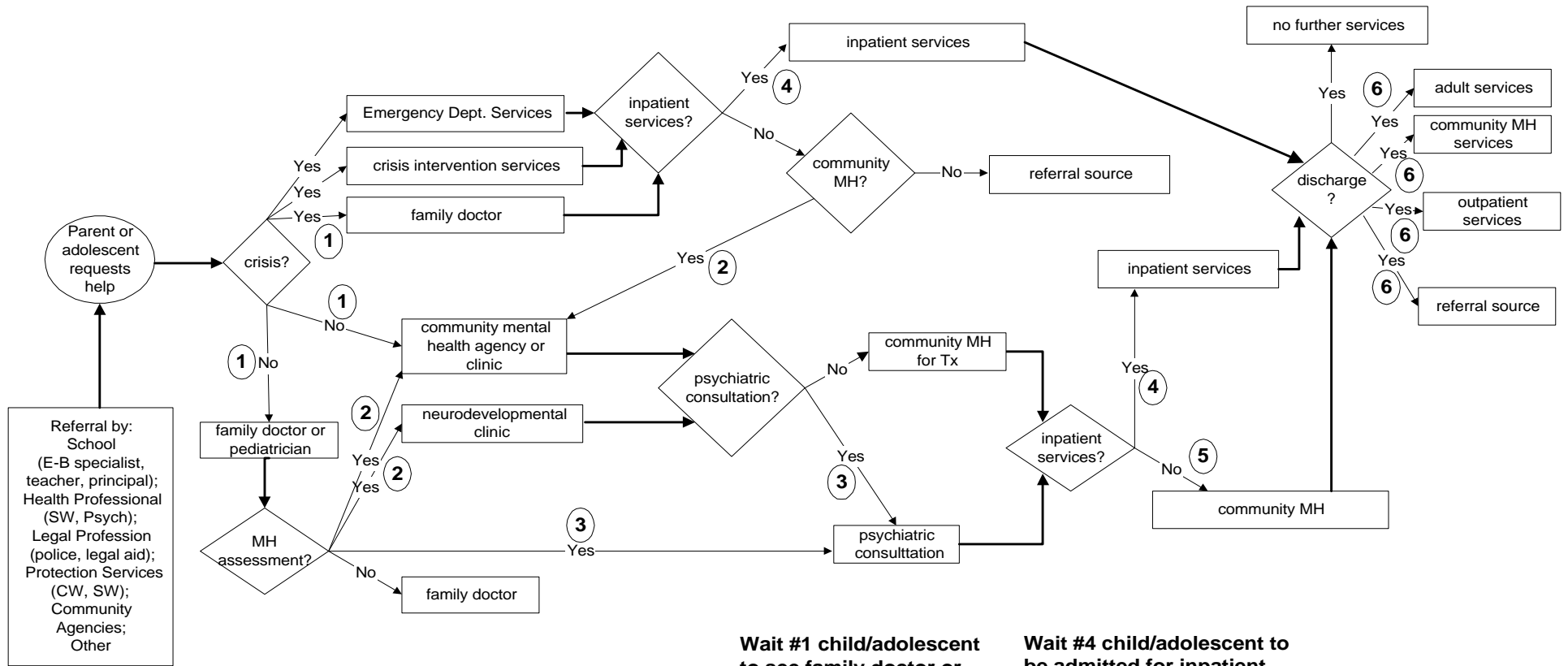


Figure 4: Waiting Times for Child/Youth Mental Health Services, Edmonton Region



Wait #1 child/adolescent to see family doctor or pediatrician

Wait #2 child/adolescent to be assessed by agency or clinic

Wait #3 child/adolescent to be assessed by psychiatrist

Wait #4 child/adolescent to be admitted for inpatient services

Wait #5 child/adolescent to receive community MH services

Wait #6 child/adolescent to receive follow-up services after discharge

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