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## Inter-Professional Collaboration in Prevention and Management Problems of Infant and Toddler Nutrition

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### INTRODUCTION

One of the functions of the primary care/family physician in case management is as a care coordinator/coordinator of the patient's management<sup>1</sup>. McDonald defines a care coordinator as a patient's management activity in healthcare that involves two or more participants (including patients) to improve the quality of health services. The definition emphasizes the need for collaboration between doctors and various parties including patients, families, and other health workers in managing health problems<sup>2</sup>. This paper emphasizes coordination and collaboration between health workers and families, which aims to increase knowledge and perceptions of families and communities to prevent malnutrition events such as failure to thrive, or obesity in children in the management of the first 1000 days of life.

Management of the first 1000 days of life and growth and development monitoring needs doctors who motivate as well as parenting guidance to be able for caring and feeding the baby, as well as directly monitor the growth and development of their children. Many perceptions and stigmas develop in community can affect parenting parents towards their children. Accordingly, the function of the family physician is expected to have the ability as a care coordinator to support the successful management of the first 1000 days of life. This service requires collaboration between doctors and other healthcare professionals. This is in line with a spirit of partnership and cross-sector cooperation<sup>3</sup>. Primary care/family physician responsible for providing health services sustainably and comprehensively to individuals, families, and the community, in collaboration with other health workers. Primary care/family physicians manage various resources for the benefit of patients and families. Health services in primary care services provide primary to tertiary prevention services<sup>4</sup>, which doctors cannot do alone. Primary care/family physician is not only

responsible for primary prevention and screening, however, must also be prepared to manage health problems in the first 1000 days of life, growth, and development, including facilitating referral and reconciliation. This responsibility proves the importance of collaboration practice in primary care services.

### Overview of Doctors with Collaborative Practice

With continuing service and comprehensive physician practice in primary care, doctors can find out problems in children as well as the main source of information on childcare. As a first contact, primary care/family physician can monitor the growth and development of children and if needed, doctors in primary care can refer patients to pediatrician or ask for help to other health professionals as needed. On this occasion, the doctor can be an advisor and provide motivation and support to the patient's family regarding various health problems in children.

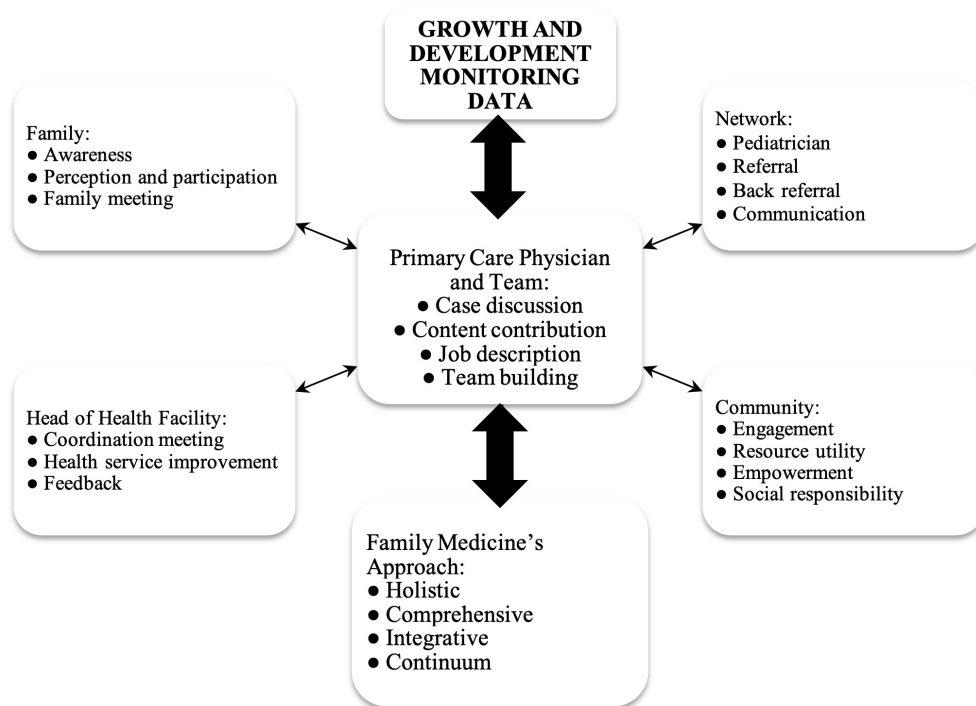
In providing its services, doctors in primary care must be prepared to work with other health workers and social service providers, delegating and coordinating the management of patients to them as needed and by taking into account the competencies of other disciplines<sup>5</sup>. A physician practicing in primary care must contribute to and actively participate in a well-functioning multidisciplinary management team and must be prepared to carry out team leadership aimed at providing knowledge and perceptions and learning processes about infant and toddler feeding for families and communities in the first 1000 days of life.

### The Collaboration Model of the First 1000 Days of Life in Primary Care

Case management in Primary Care requires medical team and health personnel who collaborate and contribute to discuss cases/health service issues, clarifying each other tasks, contributing to patient's needs, and improving team

building<sup>6</sup>. For the management of the first 1000 days of life, in addition to collaborating between health workers and patients, the medical team personnel also collaborate with families and specialist for the benefit of patients. Holistic, comprehensive, integrative, and continuity case management evaluations are reported regularly to the head of the health service facility through a periodic

meeting to identify things that need to be changed/updated/clarified according to patient needs. As a form of social responsibility or to extend the reach of services, the care coordinator team can assist certain communities while identifying surrounding/environment resources that are useful for patients.



**Figure 1. Interprofessional collaboration model in family practice for the first 1000 days of life**

This service model (Figure 1) will increase creativity, kinship, job satisfaction, commitment, attention to others, involve in determining the direction of service, and advance self-leadership, which still needs to be improved. This requires the support of health service facility management, information systems, and strengthening the leadership capacity of doctors in primary care/family practice.

Health problems in the first 1000 days of life are among the problems that are quite often encountered in the community and can be resolved by early detection and intervention if found in the initial conditions. Unless babies and toddlers who are seriously ill or have sustained weight loss, growth and development monitoring will remain in primary care. Parents can be given support and education about parenting in the first 1000 days of life including signs of malnutrition, especially failure to thrive for infants aged 0-4 months or identification of parenting obstacles to find a solution together. Home visits can be done to families of infants and toddlers who have problems with food intake or improper feeding methods so that parents/caregivers can be trained and evaluated periodically. Home visits are also useful to identify a variety of resources at home and family that have the potential to be a factor that worsens or is beneficial for the development of infants and toddlers<sup>7</sup>.

The first 1000 days of life health services need to be provided in the form of joint participation between

pediatricians, primary care/family physicians, and health professionals related to integrated information exchange in daily services including referral services.

Six forms of information exchange can be implemented in collaborative and participatory services<sup>5,8</sup>:

(1) Electronic Mail (E-mail)

Through electronic mail, the exchange of information on patient development and management can be accessed by the involved health workers as needed to be known together.

(2) Structured Information System (IT-based)

Through structured information systems based on information technology, in addition to health workers, patients can also be involved to access information and communicate with health workers directly according to predetermined controls.

(3) Patient Visit Card

Through a visit card held by the patient, all involved health workers can share information about the patient on the card to be evaluated together. Examples of patient visit cards for the first 1000 days of life such as the Integrated Healthy Card and the Maternal and Child Health Book, which contains information about a child's weight and height as well as immunization status.

(4) Periodic Meetings

Through regular meetings, the health workforce team can discuss specific cases that require special attention. In this

meeting, speakers from pediatricians can be invited to share their opinions regarding the cases discussed. This periodic meeting can be a Focus Group Discussion (FGD) or panel discussion.

#### (5) Medical Record

The medical record is a form of standard medical records owned by health service facilities that contain records and documents about patient's profile, medication checks, actions, and other services to patients in health care facilities, and must be kept confidential. Through medical records, the exchange of information can occur, and the health team is authorized to write in the medical record at the health facility. The exchange of other information is possible in the referral and back-referral letters which are part of the medical record.

#### (6) Community Clinics and Networks

Through community clinics or network clinics, communication between primary and secondary health care institutions can occur and does not depend on individual doctors. Collaborative services are clearer and more structured in one system within an institution and a primary care/family physician who controls the collaborative information system is needed, including entry date, diagnosed date, date of control visit, a control reminder system, and others.

### **The Role of Inter-professional in the First 1000 Days of Life<sup>5,9,10</sup>**

There is no single health profession that can meet all patient needs. Therefore, team-oriented health service is needed to solve patients' health problems, especially in the first 1000 days of life. Practitioners in primary care/family practice will get the maximum benefit for patients when working together and collaborating and understanding the role of each profession in their team.

#### **The Role of Doctors in Primary Care/Family Practice**

- (1) Monitor the child growth and development (body weight, height, head circumference, upper arm circumference, then mapped into WHO or CDC curve graphs or other determined graphs, including follow-up (referral) from midwives or nurses, or back referrals from specialists;
- (2) Provide exclusive breastfeeding information, child feeding, and the number of intake calories based on local conditions;
- (3) Case findings of malnutrition, especially failure to thrive and active obesity;
- (4) Collaboration with related health workers/professionals for further supervision of management including when close follow up and monitoring is needed, non-compliance outpatient management, or if there is suspicion of neglected children/abuse, or there is a social/family/parent/caregiver social psycho problem;
- (5) Take an interprofessional approach, a family approach including home visits and nutritional counseling to achieve weight growth, strengthen parent-child relationships, and cognitive development of children;
- (6) Conducting community diagnosis and interventions at the community level in preventing nutrition problems in the community.

#### **The Role of the Nurse in Primary Care/Family Practice**

- (1) Become a doctor's colleague in daily services in a primary care/family practice service team;
- (2) Providing health education to families and groups of mothers regarding baby and toddler care, including feeding, and evaluating growth and development;
- (3) Doing home visits towards problematic families with babies and toddlers, meeting their parents and evaluating the family and home environment;
- (4) Collaborating with doctors when observing and caring for patients at home or when becoming an integrated health care supervisor for children.

#### **The Role of the Midwife in Primary Care/Family Practice**

- (1) Provide antenatal care, childbirth, and normal postpartum care in collaboration with primary care/family physicians and obstetricians;
- (2) Provide communication, information, and education about babysitting and toddlers, including exclusive breastfeeding and subsequent baby food;
- (3) Perform normal childbirth care (with doctors' supervision) and ensure the initiation of early breastfeeding;
- (4) Give family planning advice (if needed) as well as information and teach mothers about lactation management;
- (5) Assist case findings of failed growth through the development of community activities.

#### **The Role of Nutritionist in Primary Care/Family Practice**

- (1) Advice nutrition and nutrition issues individually or in groups about good feeding patterns for babies and toddlers;
- (2) Analysis of nutritional needs and food intake (food recall/records and FFQ) in problematic cases and provide this information to the doctor;
- (3) Evaluate eating patterns, eating behavior, and ways of feeding children by caregivers as well as providing this information to doctors for cases of infants and toddlers with nutritional problems;
- (4) Finding cases of malnutrition, over nutrition, helps make a study of the nutritional aspects before referring to a doctor and educating feeding.

#### **The Role of the Physiotherapist in Primary Care/Family Practice**

- (1) Evaluate and maintain body functions. For example, in the case of children, the physiotherapy team can train the infant/toddler's oral reflex to prepare breastmilk substitutes if needed;
- (2) Providing exercises needed for infants/toddlers to prevent developmental delays.

#### **The Role of Social Worker/Cadres in Primary Care/Family Practice**

- (1) Providing services based on community empowerment, supervised and coordinated by medical personnel;
- (2) Conduct early detection of the risk of developmental disorders of children in the community and refer to the first level health facilities;

(3) Organizing family health information in the community.

**The Role of Psychology of Children and Family**

- (1) The intervention of child social or psycho-social behavior problems;
- (2) Evaluation and intervention of family dysfunction;
- (3) Management of parenting in the family.

**The Role of the Pediatrician**

- (1) Receive referrals from primary care physician/family physician;
- (2) Conducting evaluations, examinations, and specific management according to the competence of

- pediatricians;
- (3) If necessary, conduct additional tests such as blood tests, ferritin, kidney function, thyroid, antibodies, or chromosome analysis, or chest radiograph if there is a history of respiratory tract infections in children;
- (4) Write a referral letter back to primary care physician/family physician for monitoring advanced management in the primary care service as well as providing further control information to the pediatrician.

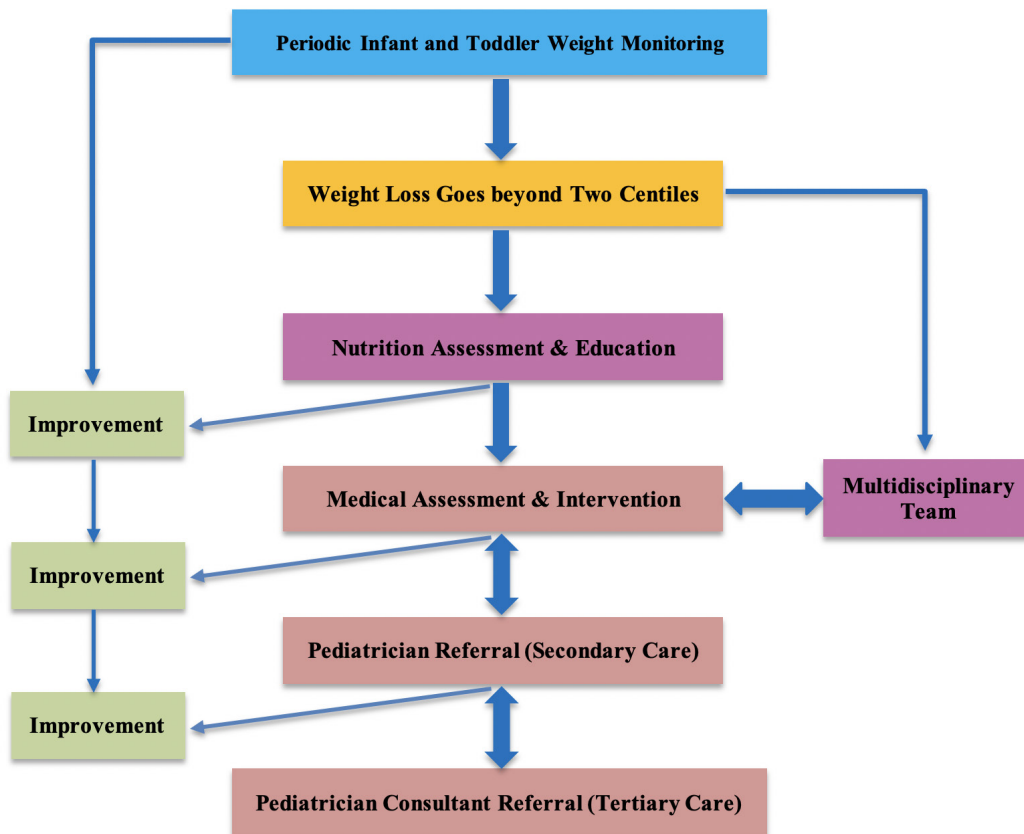


Figure 2. Flow chart of failure to thrive in primary services<sup>9</sup>

**Failure to Thrive Procedures in Collaborated Primary Care Services<sup>9,10</sup>**

The flow approach on Figure 2 requires active collaboration between pediatricians, primary care physicians, nutritionists, nurse, midwife, and other health workers, as well as strengthening the competence and independence of each health worker in the community. At the earliest level, it requires the independence of family and community and the ability to supervise the growth and development of children.

**Summary**

Interprofessional collaboration practice is a practice between health professionals with a variety of medical professions, where each profession takes and shares responsibility in managing individual, family, and community health problems following their respective educational backgrounds and competencies. It is very much

needed in the management of the first 1000 days of life since early pregnancy until toddler for the sake of healthy growth and development of future generation.

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