

Achieving High Value Outcomes: Care Coordination Capacity Building and Measurement

Presented to Care Transformation Collaborative –Rhode Island Annual Learning Collaborative
Primary Care Plus: Paving the Way
November 12, 2015

Hannah Rosenberg, MSc.
Program Coordinator, Boston Children's Hospital
Manager, National Center for Care Coordination Technical Assistance

Richard C. Antonelli, MD, MS
Medical Director of Integrated Care, Boston Children's Hospital, Harvard Medical School
Director, National Center for Care Coordination Technical Assistance



Boston Children's Hospital



HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL

Learning Objectives

- Gain understanding of an elemental, team-based approach to improving care coordination service delivery
- Develop understanding of the value of tracking/measuring cc activities and methods to do so
- Learn about tools to support provision/measurement of Care Coordination



Care Coordination

Care Coordination is the set of activities in “the space between”-
Visits, Providers, Hospital Stays

Turchi RM, Antonelli RC et al. Patient- and Family-Centered Care Coordination: A Framework for Integrating Care For Children and Youth Across Multiple Systems. *Pediatrics*. May 2014.

Integrated Care

seamless provision of health care services, from the perspective of the patient and family, across entire care continuum.
It results from coordinating the efforts of all providers, irrespective of institutional, departmental, or community-based organizational boundaries.

*Antonelli, Care Integration for Children with Special Health Needs:
Improving Outcomes and Managing Costs.
National Governors Association Center for Best Practices, 2012*



Why is Care Coordination Important?



National Statistics

Societal Impact

- 30% of American health care spend is ineffective, inefficient, harmful, or inappropriate care

Family Impact*

- Nearly 1 in 5 CSHCN have health conditions which have caused financial problems for the family
- Daily activities are greatly impacted for the nearly half of CSHCN with emotional, behavioral or developmental problems
- One-quarter of all CSHCN have families who cut back or stopped working due to their child's health needs
- Nearly a quarter of CSHCN have families who spend 5 + hours per week providing and/or coordinating their child's health care

Multi-disciplinary, team-based care*

- Nearly 1 in 3 CSHCN experience some emotional, behavioral or developmental health problems in addition to other health conditions
- Co-morbidity of health conditions is common—29.1% of CSHCN have 3 or more conditions asked about in the survey

*Data Resource Center for Child & Adolescent Health, a project of the Child and Adolescent Health Measurement Initiative, <http://cshcndata.org>



Boston Children's Hospital



HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL

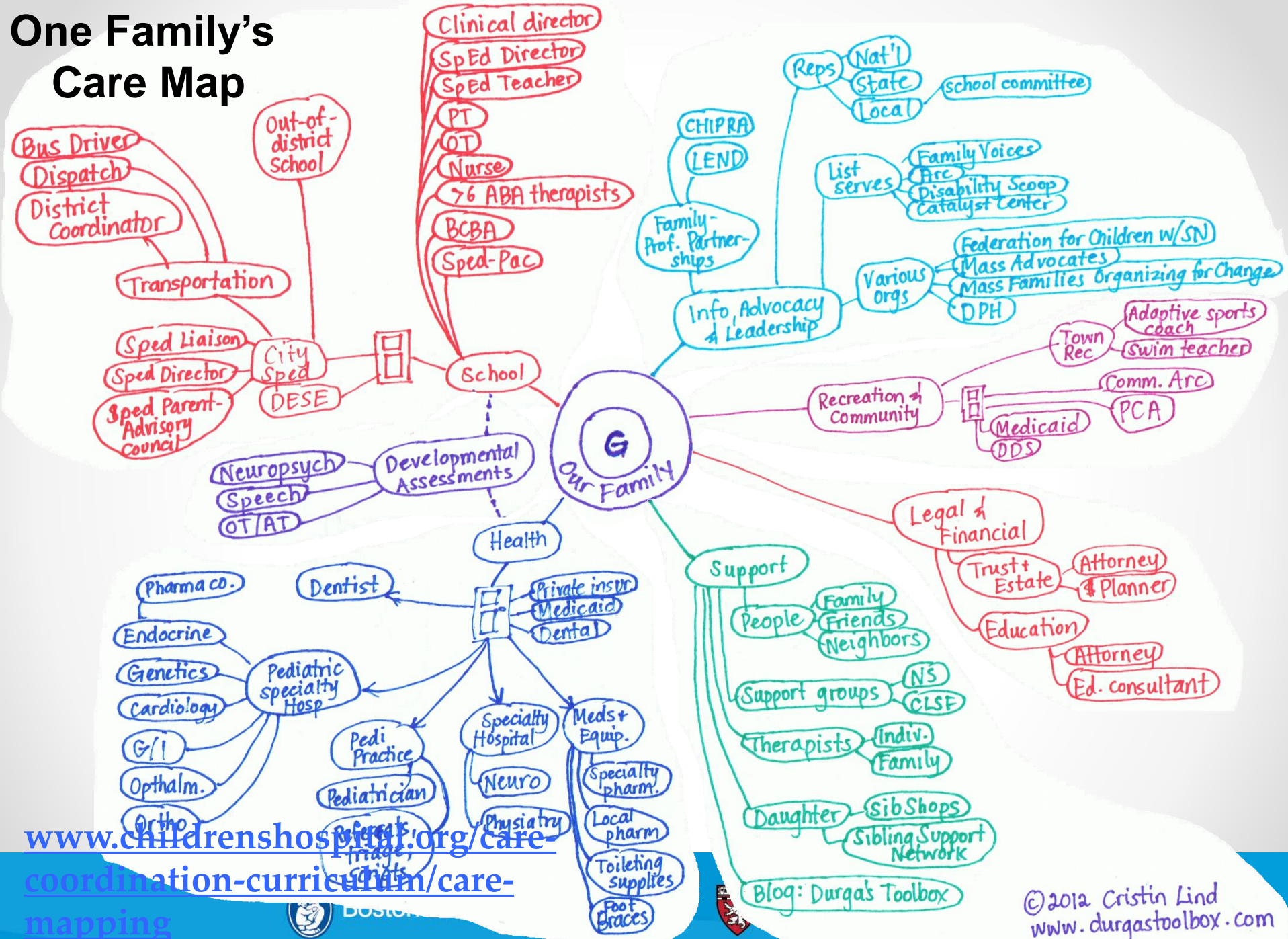
Opportunity to Improve: PCP-SP Communication

- Tracked communication rates between PCP and SP
- When information was received w/in 1 mo. of first specialist visit, PCP's reported having enough information to provide optimal care 96% of the time
- When no information was received, PCP's only reported having enough information to provide optimal care 35% of the time

Stille 2006



One Family's Care Map



www.childrenshospital.org/care-coordination-curriculum/care-mapping

© 2012 Cristin Lind
www.durgastoolbox.com

Identifying Gaps- Areas of Improvement



Triple Aim

- Improving the patient experience of care
- Improving the health of populations
- Reducing the per capita cost of health care

Source: Institute for Healthcare Improvement. [<http://www.ihp.org>]. 2014



CC Framework Key Elements

Key Elements	Sample Measures
1) Needs assessment, continuing CC engagement	Use of a <u>structured</u> care coordination needs assessment tool/process Ask family: did you get what you wanted?
2) Care planning and coordination	Family engagement in co-creation and implementation of care plan Care team members can access, update plan
3) Facilitating care transitions	“Closing the loop”: timely communication after referral visit (to PCP/family/others) Measure bundles, adaptations (HEDIS, CTM-P, CAHPS-PCMH/PICS, ABCD)
4) Connecting with community resources/schools	Link to family partner/family-run org/peers Referral connections made Bi-directional communication of results
5) Transitioning to adult care	Acquisition of self-management skills ID adult providers with capacity, expertise

Tracking and Capturing the Value of Care Coordination

- Measure what matters!
- Why is it important?
- How this data can be a catalyst for transformation
- Success stories



Overview of measures to track impact of implementing changes

Link measures to Triple Aim outcomes!

1.) Improve Patient/Family Experience

administer patient/family experience surveys (eg, PICS)

2.) Improve Outcomes– Structural and Process

Tracking Use of CC needs assessments, care plans, care transitions:
between providers; to community resources-- Close the loop performance

Track outcomes using CCMT

3.) Reduce Costs

Medical expenses: unnecessary ED utilization; rates of hospitalization and unplanned readmissions; duplication of testing/resources

4.) Triple Aim Plus 1-- Provider Experience matters

USABILITY & FEASIBILITY

Provider/care team experience

CCMT or other tracking tool

Time and resources it takes to implement, outcomes achieved from provider perspective



Tools to Support this work



Care Coordination Measurement Tool (CCMT)

- Value capture tool designed to track care coordination activities that are currently being done but not being accounted or reimbursed for, assign value to them and get to a “true cost of care”
- Intended to be adapted to reflect activities and outcomes of teams in diverse settings
- Tool can be implemented in different ways depending on goal of collecting data → for every encounter, once a week every quarter, etc.
- Paper version or web-based versions have been used in past
- Is in AHRQ Atlas, core tool can be found on BCH website:
<http://www.childrenshospital.org/care-coordination-curriculum/care-coordination-measurement>



CCMT intended to be used to address two different domains of health care:

- **Quality Improvement**
- **Finance**



Medical Home Care Coordination Measurement Tool[©]

Site Code: _____

Form # _____ of _____

Date	Patient Study Code And Age	Patient Level	Focus	Care Coordination Needs	Activity Code(s)	Outcome(s)		Time Spent*							Staff	Clinical Comp.	Initials
						Prevented	Occurred	1	2	3	4	5	6	7			
<p align="center">Patient Level</p> <p><u>Level</u> <u>Description</u></p> <p>I Non-CSHCN, Without Complicating Family or Social Issues</p> <p>II Non-CSHCN, With Complicating Family or Social Issues</p> <p>III CSHCN, Without Complicating Family or Social Issues</p> <p>IV CSHCN, With Complicating Family or Social Issues</p> <p>Focus of Encounter (choose ONE)</p> <p>1. Mental Health 2. Developmental / Behavioral 3. Educational / School 4. Legal / Judicial 5. Growth / Nutrition 6. Referral Management 7. Clinical / Medical Management 8. Social Services (ie. housing, food, clothing, ins., trans.)</p>		<p align="center">Care Coordination Needs (choose all that apply)</p> <p>1. Make Appointments 2. Follow-Up Referrals 3. Order Prescriptions, Supplies, Services, etc. 4. Reconcile Discrepancies 5. Coordination Services (schools, agencies, payers etc.)</p> <p align="center">Time Spent</p> <p>1 – less than 5 minutes 2 – 5 to 9 minutes 3 – 10 to 19 minutes 4 – 20 to 29 minutes 5 – 30 to 39 minutes 6 – 40 to 49 minutes 7 – 50 minutes and greater* (*Please NOTE actual minutes if greater than 50)</p> <p align="center">Staff RN, LPN, MD, NP, PA, MA, SW, Cler</p> <p align="center">Clinical Competence</p> <p>C= Clinical Competence required NC= Clinical Competence not Required</p>		<p align="center">Activity to Fulfill Needs (choose all that apply)</p> <p>1. Telephone discussion with: a. Patient e. Hospital/Clinic b. Parent/family f. Payer c. School g. Voc. / training d. Agency h. Pharmacy</p> <p>2. Electronic (E-Mail) Contact with: a. Patient e. Hospital/Clinic b. Parent f. Payer c. School g. Voc. / training d. Agency h. Pharmacy</p> <p>3. Contact with Consultant a. Telephone c. Letter b. Meeting d. E-Mail</p> <p>4. Form Processing: (eg. school, camp, or complex record release)</p> <p>5. Confer with Primary Care Physician</p> <p>6. Written Report to Agency: (eg. SSD)</p> <p>7. Written Communication a. E-Mail b. Letter</p> <p>8. Chart Review</p> <p>9. Patient-focused Research</p> <p>10. Contact with Home Care Personnel a. Telephone c. Letter b. Meeting d. E-Mail</p> <p>11. Develop / Modify Written Care Plan</p> <p>12. Meeting/Case Conference</p>		<p align="center">Outcome(s)</p> <p>As a result of this care coordination activity, the following was PREVENTED (choose ONLY ONE, if applicable):</p> <p>1a. ER visit 1b. Subspecialist visit 1c. Hospitalization 1d. Visit to Pediatric Office/Clinic 1e. Lab / X-ray 1f. Specialized Therapies (PT, OT, etc)</p> <p>2. As a result of this care coordination activity, the following OCCURRED (choose all that apply):</p> <p>2a. Advised family/patient on home management 2b. Referral to ER 2c. Referral to subspecialist 2d. Referral for hospitalization 2e. Referral for pediatric sick office visit 2f. Referral to lab / X-ray 2g. Referral to community agency 2h. Referral to Specialized Therapies 2i. Ordered prescription, equipment, diapers, taxi, etc. 2j. Reconciled discrepancies (including missing data, miscommunications, compliance issues) 2k. Reviewed labs, specialist reports, IEP's, etc. 2l. Advocacy for family/patient 2m. Met family's immediate needs, questions, concerns 2n. Unmet needs (PLEASE SPECIFY) 2o. Not Applicable / Don't Know 2p. Outcome Pending</p> <p align="right">Supported by grant HRSA-02-MCHB-25A-AB</p>											
Rev-09/10																	



Example Results from CCMT

32% of total 3855 CC encounters had something prevented

Of the 1232 CC encounters where prevention was noted as an outcome:

<u>Outcome Prevented</u>	<u># CC Encounters</u>	<u>Percentage</u>
Visit to Pediatric Office / Clinic	714	58%
Emergency Department Visit	323	26%
Subspecialist Visit	124	10%

62% of RN CC Encounters prevented something

33% of MD CC Encounters prevented something

Non-revenue-generating office nurses drive the most system-level cost savings: avoidance of ED and office visits

National Study of Care Coordination Measurement in Medical Homes
Antonelli, Stille, and Antonelli, 2008



CCMT Today

- Available in public domain on Boston Children's Hospital website
- Many institutions are using CCMT to capture value of work that they are doing
 - Pediatric and Adult primary care and specialty clinics (inpatient and ambulatory), research settings, family-partner organizations)



US MCHB funded Pediatric Care Coordination Curriculum

Antonelli RC, Browning DM, Hackett-Hunter P, McAllister J, Risko W. *Pediatric Care Coordination Curriculum*. Boston Children's Hospital, 2014.



Pediatric Care Coordination Curriculum

funded by

U.S. Maternal and Child Health Bureau

CC Curriculum Foundational Principles

- 80/ 20 Rule: 80% of CC is core activities and functions
 - 20% is specific and must be developed “organically”, reflecting Assets, vulnerabilities
 - Culture, language
 - Sociodemographics
 - Geography
- CC training necessary for families, nurses, social workers, trainees, community health workers, MD’s
- Currently being implemented at Boston Children’s Hospital and in greater Boston Community
- Found at www.childrenshospital.org/care-coordination-curriculum



MA CHQC

Care Coordination Strengths and Needs Assessment

- Set of Recommendations
 - Tool Template
- Compendium of Example Tools

<http://www.masschildhealthquality.org/work/care-coordination/>

MA Child Health Quality Coalition *Care Coordination Strengths and Needs Assessment* . Funded by the Centers for Medicare and Medicaid Services (CMS) through grant funds issued pursuant to CHIPRA section 401(d) .



CC Strengths/Needs Assessment Tool: Structured Approach by Domain

Medical	Referrals needed, medications, blood/lab tests, functional status, self-care, DME, managing special health problems (sleep, growth/nutrition, etc), oral health, transition to adult care if >14
Behavioral	Help managing behavioral issues, meeting child's emotional needs, behavioral issues/risky behaviors as barriers to care Connect to resources for support: need an IEP eval? in-home therapy? after school support?
Social	Making/keeping friends, family support network/caregiver needs, family issues (siblings, divorce, etc), parenting groups/recreational programs/other community resources
Educational	Learning/school performance, IEP/504/ADA/Individual Health Plans, educational advocates/lawyers
Other	Financial (insurance, income assistance), housing/ food assistance, independent living, child care/transportation/other assistance programs, legal (guardianship, wills/trusts, immigration)

Template and Accompanying resources can be found at:
<http://www.masschildhealthquality.org/work/care-coordination/>



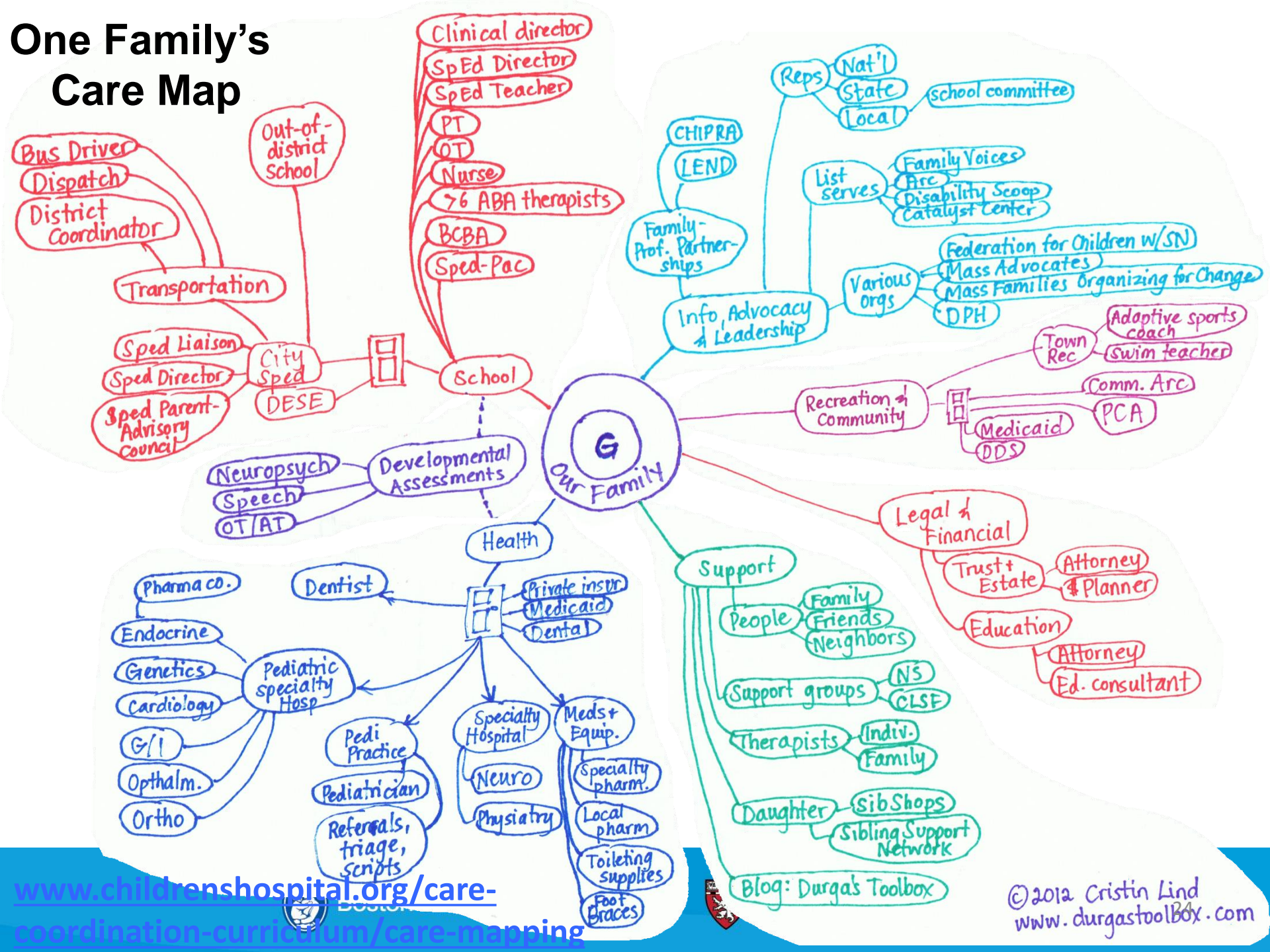
Care Map

- Care Map developed by Cristin Lind
- Designed to be family driven tool to support family/professional partnership
- Tool to show family-centered perspective
- Guides available that help families and professionals understand how to develop and use care map

www.childrenshospital.org/care-coordination-curriculum/care-mapping



One Family's Care Map



Approach to Shared Care Planning

- Develop the shared Care Plan document- involve stakeholders
- Work with families to refine the elements of the Care Plan document
- Start with small tests of change, 2-3 families, to refine the Care Plan itself and the process for developing it
- Identify “high value” elements of care plan through feedback
- Accessibility – care team members, including family
- Develop strategies for reassessment and refinement of the care plan (progress toward goals)



Format for Action Items on the Care Plan

Action	Goal	Person Responsible	Time Frame	Status
1.				
2.				
3.				
4.				
5.				



Care Transitions: Warm Hand-offs

Components of a high quality “handoff”/ care transition

- Patient name
- Referring provider name
- Clinical question to be answered by the referral
- Type of referral (consult, long-term co-management)
- Urgency of referral
- Relevant clinical information
- Follow-up accountability



Take Home Points

- Integration is Essential for Success— evidence exists
- Care Coordination is Necessary but not Sufficient to Achieve Integration- need involvement of patient/family
- CC is the set of activities which occurs in “the space between”
 - Visits, Providers, Hospital stays, Agency contacts
- Only way to succeed is to engage all stakeholders—including patients and families— as participants and partners
- Medical Home is a necessary, but not sufficient, component of high performing system



Resource:
National Center for Care
Coordination Technical
Assistance



National Center for Care Coordination Technical Assistance (NCCCTA)

The mission of the center is to support the promotion, implementation and evaluation of care coordination activities and measures in child health across the United States

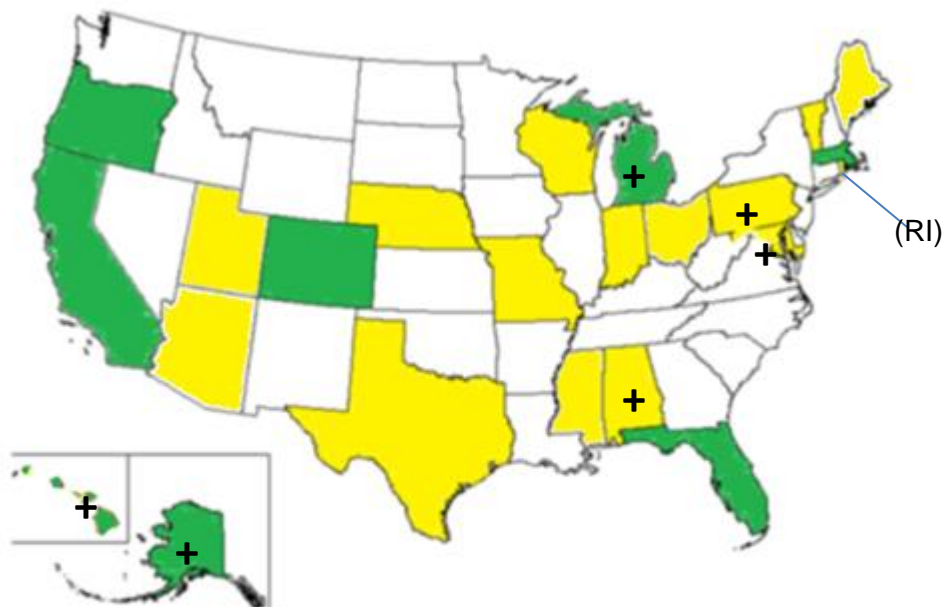
Please contact: Hannah Rosenberg, MSc., Manager of the NCCCTA at hannah.rosenberg@childrens.harvard.edu or 617 919 3627 for more information

The National Center for Care Coordination Technical Assistance is working in partnership with the National Center for Medical Home Implementation (NCMHI) in the American Academy of Pediatrics. The NCMHI is supported by the Health Resources and Services Administration (HRSA) of the United States Department of Health and Human Services (HHS) grant number U43MC09134.



Pediatric Care Coordination Community of Learners

Legend



■ states with entities that are in early stages of engagement. Expressed interest in developing care coordination workforce capacity on level of individual institution and/or state-wide program.*some sites may have implemented since our last communication

■ states with entities that have used the Pediatric Care Coordination Curriculum as a resource to implement care coordination workforce capacity building

⊕ = states engaged in statewide implementation, some partnering with State Title V programs

As of May 1, 2015

Across these states, we are aware of over 20 different institutions using the Pediatric Care Coordination Curriculum as a resource



National Center for Care Coordination Technical Assistance

- Environmental Scan
 - develop a peer network for the care coordination service delivery community.
- Technical Assistance support:
 - provide both strategic and tactical guidance to entities wishing to use the PCCC and/or CCMT to improve care coordination service delivery.



Questions and Comments?



Selected References

AHRQ Care Coordination Atlas (McDonald Nov 2010) and companion document Care Coordination. Accountability Measures for Primary Care Practice (McDonald Jan 2012)

Antonelli, *Care Integration for Children with Special Health Needs: Improving Outcomes and Managing Costs*. National Governors Association Center for Best Practices, 2012

Antonelli RC, Stille CJ, Antonelli DM. Care Coordination for Children and Youth with Special Health Care Needs: A Descriptive, Multisite Study of Activities, Personnel Costs, and Outcomes. *Pediatrics* 2008; 122.

Commonwealth/Antonelli Pediatric Framework (May 2009) Antonelli R, McAllister J, Popp J. Making Care Coordination a Critical Component of the Pediatric Health System: A Multidisciplinary Framework. The Commonwealth Fund. 2009.

Institute for Healthcare Improvement. [<http://www.ihp.org>]. 2014

MA Child Health Quality Coalition Care Coordination Framework. *Funded by the Centers for Medicare and Medicaid Services (CMS) through grant funds issued pursuant to CHIPRA section 401(d)*. Contact: grogers@mhqp.org

MA Child Health Quality Coalition *Care Coordination Strengths and Needs Assessment*. *Funded by the Centers for Medicare and Medicaid Services (CMS) through grant funds issued pursuant to CHIPRA section 401(d)*.

McAllister, Cooley, Van Cleave, Boudreau, and Kuhlthau,. Medical Home Transformation in Pediatric Primary Care– What Drives Change? *Ann Fam Med* 2013; 11:S90-S98

Turchi RM, Antonelli RC et al. Patient- and Family-Centered Care Coordination: A Framework for Integrating Care For Children and Youth Across Multiple Systems. *Pediatrics*. May 2014.

Stille, et al. Determinants and Impact of Generalist-Specialist Communication About Pediatric Outpatient Referrals. *Pediatrics* 2006, 118 (4).

Web Links

Care Coordination Curriculum: [<http://www.childrenshospital.org/care-coordination-curriculum>]

Care Coordination Measurement Tool: [<http://www.childrenshospital.org/care-coordination-curriculum/care-coordination-measurement>]

Care Mapping: [<http://www.childrenshospital.org/care-coordination-curriculum/care-mapping>]

