

Proposal for a Utah Children's Medical Home Demonstration

from the Children's Healthcare Improvement Collaboration (CHIC)

CHIC's Utah partners include:

- Utah Department of Health
 - Division of Medicaid and Health Finance
 - Office of Healthcare Statistics
 - Bureau of Children with Special Health Care Needs
- University of Utah
 - Department of Pediatrics
 - Utah Pediatric Partnership to Improve Healthcare Quality (UPIQ)
 - Medical Home Portal (www.medicalhomeportal.org)
 - Department of Biomedical Informatics
- Intermountain Healthcare
 - Primary Children's Medical Center's Pediatric Continuum of Care Managers program
 - Institute for Health Care Delivery Research
- *HealthInsight*
- Utah Family Voices

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Executive Summary – Utah Children’s Medical Home Demonstration

Can we improve the health of Utah’s children while spending less on their healthcare?

The **Children’s Healthcare Improvement Collaboration (CHIC)*** proposes collaborating with insurers and the Utah Health Reform Task Force on a 4-year multi-payer demonstration of quality improvement (QI), the medical home model, and innovative payment strategies, aimed at improving children’s healthcare and outcomes and decreasing overall costs. The demonstration will involve 30-40 primary care pediatricians and four pediatric subspecialty practices. Interventions will include:

- Central support for measurement-driven practice-based QI and care coordination (CC)
 - Medical Home Coordinators ‘embedded’ in pediatric practices to develop and support practice teams in QI, CC, and implementing other elements of medical home and family-centered care
 - Practice coaches to guide and support QI efforts and share lessons learned across practices
 - Parent Partners in each practice to advise on policies/processes and assist other families to connect with needed services and supports
- Practice compensation to enable practices to build QI infrastructure and systems, support needed incremental staff, improve access to care, and provide services that are not currently compensated, such as electronic visits, care conferences, and population management

A 5-year CHIPRA Quality Demonstrations grant, awarded to Utah Medicaid in 2010, will cover most of the central support and project evaluation costs. Practice compensation and remaining central costs will be supported by the multi-payer demonstration. The practice compensation will enable both primary care and subspecialty practices to make needed investments and experiment with novel approaches to care. These costs will be split among payers by market share of insured children – see *Projected Costs* on page 8 for detail. Practices will budget these funds and be accountable for their appropriate use and for performance and outcomes measures. In years 3- 4, a portion of documented savings in overall costs of care (formula to be developed) will be shared with participating practices.

Evaluation measures will be developed with payers, participating practices, and the Task Force. They will address access, utilization/costs, quality of care, clinical outcomes, and patient/family experience. A robust evaluation will be supported by a set of resources that is unique to this project, including:

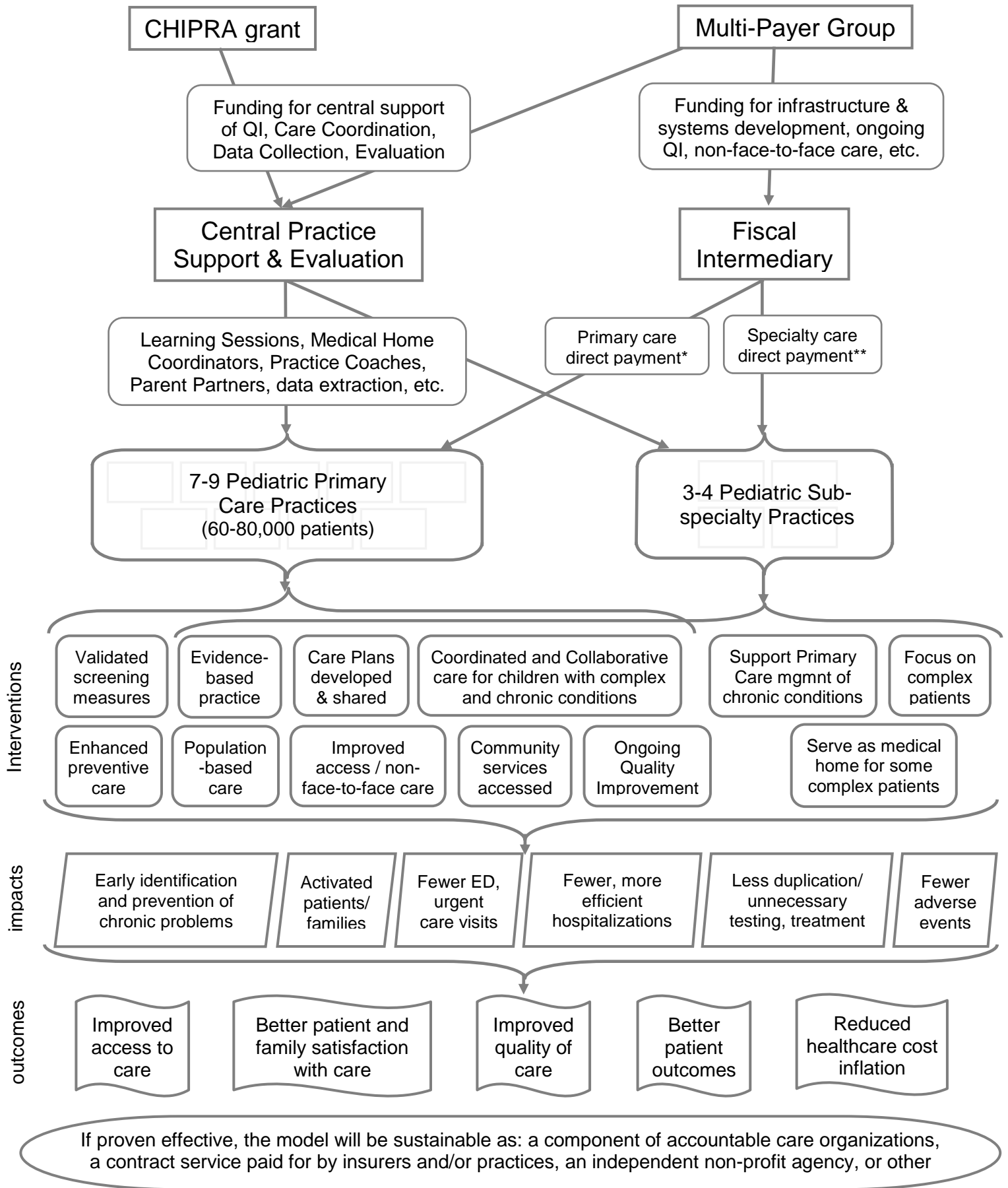
- Utah All-Payer Claims Database (APCD), enabling comparisons to ‘virtual’ control practices
- Independent evaluation by the Institute for Healthcare Delivery Research
- National evaluation supported by the grant agency[†]
- *HealthInsight’s* EHR Measure Calculator, to extract clinical/quality data from practice EHRs
- QI TeamSpace, a quality improvement project collaboration and data reporting system
- Potential to use prospectively recruited control practices to compare a range of measures

Practices will be selected in December 2010 from among those that respond to a ‘request for applications,’ using criteria[‡] that will include level of commitment and proportion of patients insured by Medicaid. Project staff will be hired and trained to enable implementation in March 2011. Periodic data and interim evaluation reports will guide ongoing adjustments in project strategies and practice compensation. The interventions will continue through November 2014 (3½ years).

Lessons learned in the demonstration and its evaluation will inform ongoing healthcare reform in Utah and may guide insurers in compensation design and provider contracting. Sustainability of this approach to QI and medical home will depend on the balance between the costs of a mature practice support system and demonstrated improvements in healthcare cost, access, quality, and outcomes. We expect that systems like this will be critical to the success of evolving healthcare delivery/payment structures, such as accountable care organizations (ACO).

* CHIC’s major partners include the Utah Medicaid program, the University of Utah’s Utah Department of Pediatrics and Pediatric Partnership to Improve Healthcare Quality, *HealthInsight*, Intermountain Healthcare’s Institute for Healthcare Delivery Research and Pediatric Continuum of Care Managers program, and Utah Family Voices.

† CHIPRA Quality Demonstrations are funded by the Centers for Medicare and Medicaid Services (CMS); national evaluation will be performed in collaboration with the Agency for Healthcare Research and Quality (AHRQ) and implemented with Mathematica Policy Research and the Child Policy Research Institute as contractors.



* ~\$40,000/clinician FTE/year (~10% of gross revenue for wRVU-related billings); plan to include 30-40 FTEs

** ~\$40,000/practice/year; plan to include 4 subspecialty practices; see page 8 for budget details.

Proposal for a Utah Children's Medical Home Demonstration (UCMHD)

Can we improve the health of Utah's children while spending less on their healthcare? Can providers, payers, and families work together to meet the dual challenges of healthcare that is too expensive and outcomes that reflect gaps in quality, equity, and engagement?

The **Children's Healthcare Improvement Collaboration (CHIC)** proposes a **4-year demonstration** of the medical home model of care and innovative approaches to compensating clinicians and supporting quality improvement and care coordination. The demonstration will be supported by a **Children's Health Insurance Program Reauthorization Act (CHIPRA) Quality Demonstrations grant** and funding from insurers of children in Utah through the multi-payer demonstrations group established by the **Utah Legislature's Health Reform Task Force**.

Background

The per capita costs of healthcare in the United States exceed those of every other country, yet the outcomes of that care, as measured by many health status criteria, are worse than in most developed nations. Healthcare costs are a significant burden on state and federal governments, on employers, and on individuals and families. The rate at which costs are increasing threatens the competitiveness and sustainability of our corporations and institutions. Although the U.S. offers some of the most advanced healthcare technology and research in the world, the quality of care delivered to its citizens is far from optimal. Myriad factors contribute to this situation and there are no simple solutions.

Widely accepted contributors to our excess healthcare costs and suboptimal quality include:

- Healthcare payment systems that reward the delivery of more services (and particularly certain kinds of services) rather than rewarding better quality or better outcomes of care
- Suboptimal access to the right care at the right time in the right place
- Inadequate systems (electronic and organizational) to support continual improvement in the quality of care – including better access to care, continuity and coordination of care, and collaboration among providers, particularly in the care of patients with chronic conditions
- Lack of patient/family engagement in improving outcomes through changing lifestyle or habits and through partnering with clinicians in planning and implementing care

Children comprise 33% of Utah's population (26% of the nation's) and, because they are generally healthier than adults, account for only about 10% of healthcare costs. Yet children's healthcare also contributes to excess cost and suboptimal outcomes. Preventive measures, such as immunizations, have nearly eliminated many formerly common serious illnesses but have had little impact on others, such as autism, obesity, and depression. With advances in care for congenital conditions (e.g., heart defects, cystic fibrosis, Down syndrome), infants born prematurely, and acquired conditions (e.g., cancers, brain injury), the number of children requiring care for chronic conditions is increasing and most are living into adulthood. Roughly 11% of Utah children currently meet criteria as having special health care needs, a subset of the >30% who have at least one chronic condition (see appendix).

With the relatively small scale of children's healthcare, demonstrating that an intervention will result in improvements in access, satisfaction, and the quality, outcomes, and costs of care will be a challenge. With our relatively low costs of care compared to other states, doing so in Utah will be even more challenging. This demonstration is designed to address those challenges and to identify measurable improvements. It will provide valuable lessons to guide healthcare reform and its interventions will be adapted and replicated to meet the needs of other patient populations and other regions.

The Utah Legislature's Health Reform Task Force has encouraged multi-payer demonstrations of alternative approaches to paying for healthcare services. A well designed and rigorously evaluated demonstration could provide legislators, payers, and providers with valuable information about the effectiveness of these strategies. We propose a fiscally balanced demonstration, leveraging funding from the CHIPRA grant and other existing resources and designed and scaled to be just large enough to enable reliable and robust evaluations. The demonstration will inform ongoing efforts at reforming

healthcare and its elements will likely become key components of future healthcare delivery structures, such as accountable care organizations (ACO).

This demonstration will be led by the CHIC, established in 2010 with the award of the CHIPRA grant. The collective aim of its several components is to develop a regional system for improving the healthcare provided to children. The major partners in the CHIC are listed in the appendix, along with its several objectives. This proposal will expand on a small medical home pilot included in the grant.

The practice-based interventions will be led and supported by the Utah Pediatric Partnership to Improve Healthcare Quality (UPIQ, www.upiq.org), a quality improvement organization established in 2003 that has involved over 170 Utah primary care clinicians from 78 Utah practices in QI projects addressing topics such as asthma, autism, immunization delivery, obesity prevention, developmental screening, and medical home implementation. The demonstration will build on a primary care model for in-office care coordination for children with chronic conditions developed by the Pediatric Continuum of Care Managers (PCCM) program, based at Primary Children's Medical Center. The PCCM will collaborate in training project staff and providing ongoing counsel and support. Several other partners, including the Utah Department of Health (UDOH), *Healthinsight*, and Utah Family Voices will support the demonstration and its evaluation.

Demonstration Models and Interventions

The **medical home model** holds promise for addressing problems with quality, access, and cost and for improving the outcomes of healthcare. **Expert central support** will enable practice-based quality improvement, care coordination, and integration of family-centered care. **Innovative approaches to paying for healthcare** will enable clinicians to develop systems to deliver care more efficiently and effectively and can motivate parents to take a more active role in their children's healthcare and health. Together, these approaches will help practices, families, and organizations learn how to meet the challenges facing healthcare in Utah and the nation.

The demonstration will involve incremental implementation of the medical home model in both primary care and subspecialty pediatric practices. **Elements of medical home** to be implemented include:

- **Quality improvement (QI)**
 - Develop and integrate practice systems to support and sustain ongoing QI
 - Build 'medical home teams' among practices' staffs, supported by Utah Pediatric Partnership to Improve Healthcare Quality (UPIQ) Practice Coaches and facilitated by Medical Home Coordinators (MHC) who are 'embedded' in practices and employed/supervised by the CHIC
- **Access to care**
 - Improved/accommodative scheduling (open access, extended hours, etc.)
 - Enhanced phone access, electronic visits (e-visits); reduce 'unnecessary' visits
 - Planned chronic care visits, extended visits for patients when they need them
- **Continuity of care**
 - Improve continuity through team approaches, electronic communication/records access
 - Develop and share chronic care plans across specialties, disciplines, and settings
- **Care coordination**
 - Actively coordinate care across specialties, disciplines, and settings
 - MHCs will lead and mentor staff in developing care coordination skills and systems
- **Collaborative care**
 - Primary and subspecialty care collaboration for patients with chronic/complex conditions
 - Eliminate duplicative/unnecessary care; assure timely access to appropriate care
- **Patient-/Family-centered care**
 - Integrate parent/family/consumer perspectives into practice planning and QI activities
 - Enhance partnerships with families, esp. those with children with chronic conditions
 - Identify and utilize Parent Partners to advise the practice and help families connect with services and supports (Parent Partner Coordinator will train and support the Partners)

- **Evidence-based practice**
 - Consistent use of validated screening tools
 - Implement guidelines for care of chronic conditions, genetic conditions, etc.
 - Use measures/data to guide QI efforts (using existing electronic tools when possible)
- **Population-based approach**
 - Use registries of patients with chronic conditions for proactive care and follow-up
 - Track all patients for completion of planned/needed preventive and screening services
 - Empower parents/patients through education and access to accurate/useful information
- **Innovation**
 - Support practices in generating ideas, implementing and measuring them in QI/PDSA (plan-do-study-act) approach, reporting and disseminating successes and lessons

Most practices, particularly small practices that comprise the majority of those providing pediatric primary care,¹ lack the resources, expertise, and time to change their approaches to care and to build the systems needed to become medical homes. They also lack the means to hire, train, and support staff to develop teams, implement continuous QI, provide care coordination, and engage families. This demonstration will provide those means by centrally hiring, training, and supporting staff and assigning them to practices where they will become integral members of the practices' teams. The project leadership will bring expertise and focus to managing these staff. The central organization will enable sharing of experience, resources, and lessons across practices, as well as a system for back-up and coverage for illness/vacation for individual staff members.

Practices also need to invest in building teams, purchasing tools, and developing systems. Structuring payment to support such investments in providing better access, quality, and coordination will enable improved outcomes and decreases in unnecessary costs. In addition to the central assistance described above, this demonstration will provide primary care and subspecialty pediatric practices with direct compensation to support:

- Building/purchasing infrastructure and systems (including electronic capabilities)
- Staff time to build and integrate practice teams and perform ongoing QI
- Coordinating care for children with chronic conditions
- Providing care in the most efficient ways (including off-hours, by phone, by e-mail/web, care conferences, etc.) despite lack of fee for service compensation

The proposed payments include \$40,000 for each participating primary care pediatrician (represents about 10% of median collections for pediatrician work) and \$40,000 for each subspecialty practice. We expect about 35 pediatricians and 4 subspecialty practices will participate. Expenses not covered by the CHIPRA grant will be split among the participating payers according to market share (see Budget discussion below for more detail).

Practices will propose a budget for use of the direct compensation and be accountable for keeping to the budget (once approved). We expect about half of the funding will be used to purchase/develop systems and support incremental staff and about half to pay for clinician time spent providing non-billable forms of care. The compensation should not increase personal income for clinicians. In the 2nd thru 4th years of the project, increasing proportions of the compensation will "at risk" – i.e., will not be paid if measures of medical home implementation, performance, and outcomes are not met:

- 1st year – primarily to build infrastructure and systems (full budget provided)
- 2nd year – progress toward 'medical home' and evidence of quality improvement (20% at risk)
- 3rd year – further medical home progress, evidence of improved outcomes (35% at risk)
- 4th year – achievement of medical home, evidence of improved outcomes (50% at risk)

To incentivize practices to focus some of their innovations around reducing costs, sharing in documented savings is proposed. In years 3 & 4, half of calculated savings in total costs of care, if any (up to \$40,000), for the previous year for each practice will be shared with the practice. We

¹ In Utah, 39% of pediatric practices are solo, 19% have 2 pediatricians, 16% have 3, 15% have 4 or 5, and the remaining 12% have 6-10. These proportions are similar to those reported nationally.

recognize the several challenges of designing such a calculation and look forward to collaborating with the payer group in developing a workable formula.

Evaluation

Several **unique resources** will support a reliable and robust evaluation of the demonstration's impact on costs, quality of care, clinical outcomes, and quality of service. These include:

- Collaboration among payers, practices, Utah Health Reform Task Force, University of Utah, Utah Pediatric Partnership to Improve Healthcare Quality (UPIQ), *HealthInsight*, and the Utah Department of Health in designing and implementing the evaluation
- Utah all-payer claims database (APCD), with a grant-funded research analyst
- Support from the CHIPRA and Agency for Healthcare Research and Quality (AHRQ) national evaluator – Mathematica Policy Research and the Child Policy Research Institute
- Independent evaluation by the Institute for Health Care Delivery Research
- Application of *HealthInsight's* EHR Measure Calculator to extract and report clinical and service quality measures from participating practices' electronic health records (EHR)
- Use of QI TeamSpace, a quality improvement project management and data reporting system
- "Virtual" control practices for comparison of utilization measures tracked through the APD
- Potential for prospectively recruiting control practices to enable tracking and comparing clinical and service quality and patient experience/satisfaction measures

We will need to identify enough measures in each category to provide a robust evaluation while not overwhelming our ability to collect and analyze the data. **Examples of potential measures include:**

Utilization/Cost measures

- Office visits (preventive, acute care, new/established patient); e-visits, phone visits
- specialist visits; behavioral health services
- urgent care and emergency care services
- hospital and behavioral health admissions
- total costs per person per year
- costs per episode of care

Quality of care measures

- Rates of newborn hearing and heel-stick screening and appropriate follow-up
- BMI recorded, diagnosis coded if abnormal, follow-up or referral planned
- Immunization rates (at 2 years, 12 years, 15-18 years)
- % of asthma patients on proper mix of rescue vs. controller meds
- compliance with evidence-based guidelines for patients with chronic conditions

Clinical outcome measures

- hospital readmissions
- rates of emergency department visits and admissions for asthma
- proportions of patients with hypertension controlled with life-style and/or medication
- days of school/work lost due to chronic conditions

Service quality / patient experience/satisfaction

- Proportion of expected preventive medicine visits delivered
 - Parent's Experiences with Getting Specialized Services (CAHPS)
 - Family Centered Care Composite (CAHPS)
 - Parent Experiences with Coordination of their Child's Care Composite (CAHPS)
- (CAHPS = Consumer Assessment of Healthcare Providers and Systems, a standardized survey of patients' experiences with ambulatory and facility-level care.)

Implementation measures (factor in determining proportion of at-risk incentive to be paid)

- NCQA Patient-centered medical home scoring system or modification thereof
- Progress in developing and implementing QI; PDSA cycles; measured improvements

An initial set of measures will be determined collaboratively with payers, practices, and other participants and stakeholders. These will be closely tracked and periodic interim evaluations shared to allow modification of the measures and evaluation strategy as the demonstration proceeds.

Budget Utilization

Demonstration expenses will include:

- 1) **central support**, including learning sessions for practice teams, “embedded” Medical Home Coordinators, quality improvement support (Practice Coaches), Parent Partner coordination/support, project administration, data development/collection/analyses, **and project evaluation**
- 2) **direct compensation for practices** described in detail above

Sources of demonstration funding will include:

- 1) **CHIPRA Quality Demonstrations grant**, awarded to the Utah and Idaho Medicaid programs
- 2) **Funding from payers** in the Health Reform Task Force’s multi-payer demonstrations (page 8)
- 3) **Additional grants or donations** to be sought by the project collaborators
- 4) **In-kind and/or indirect contributions** from other synergistic healthcare and health information technology projects (Health IT Regional Extension Centers, Beacon Communities, etc.)

Central expenses will include:

- **Project administration and staff**
 - Medical directors, senior program manager, project director (Medicaid), research analyst, Pediatric Continuum of Care Managers (PCCM) program supervisor, etc.
 - Medical Home Coordinators and Practice Coaches
 - Parent Partner Coordinator and Parent Partners
 - Office supplies, computers, travel expenses, professional development
- **Learning collaborative** approach, focused on medical home and quality improvement
 - Learning sessions, 1-2 per year (meetings with all practice teams attending)
 - Site visits – 3-6/yr (Practice Coaches, peer mentors, etc.); conference calls – 6-10/yr
 - Continuing medical education, maintenance of certification, data collection costs
- **Project evaluation**
 - Independent evaluation (Institute for Healthcare Delivery Research)
 - All-payer claims database (APCD), funded through research analyst above
 - Statistician(s), health economist, evaluation consultants, etc.

Practice compensation/incentives will be used for:

- **Developing and implementing practice infrastructure** to support medical home and QI, e.g.,
 - Enhancing the practice’s electronic health record (EHR) capabilities, such as
 - Implementing/enhancing patient registry functionality and use
 - Enabling secure clinical communications with other clinicians
 - Enhancing linkage to or use of the Utah clinical health information exchange (cHIE)
 - Enabling personalized scheduling (particularly for children with chronic conditions)
 - Offering a patient portal for secure communications, ‘e-visits,’ patient education, etc.
 - Tracking quality measures
 - Measuring, detailing, and improving practice systems (e.g., scheduling, screening, patient preparation, patient education, lab/x-ray follow-up, etc.)
 - Acquiring education, materials, programs, etc. needed to support these efforts
- **Supporting staff/clinician time** to plan and implement medical home, QI, and other activities
 - New hires or time of existing staff
 - In-office and offsite meetings for QI planning and follow-up, conference calls, etc.
 - Dedicated time for plan-do-study-act (PDSA) cycle implementation
 - Costs of meeting NCQA recognition criteria as a patient-centered medical home (PCMH)

- **Providing patient care in ways that are not currently compensated** by most third-party payers (though most have a Current Procedural Terminology [CPT] code assigned), including:
 - Telephone visits, email/secure web site visits (e-visits)
 - Care conferences, extended services
 - Care coordination; collaboration among primary care, specialty care, and other providers

Practice compensation will not be used to increase personal income for clinicians or staff

Projected Costs

Budget assumptions

- Implementation to begin in March 2011 (costs before then for start-up admin, hiring, etc.)
- To involve 30-40 general pediatricians and 4 subspecialty practices (selected as offices/sites, aim to represent a variety of practice characteristics and over-represent Medicaid insureds).
- Direct compensation of \$40,000 per year per primary care pediatrician FTE
- Direct compensation of \$40,000 per year per specialty practice/clinic
- “Net” costs below (after CHIPRA funds applied) split among payers by market share, including all lines of business

Overall Budget

- Central costs covered by CHIPRA Quality Demonstrations grant = \$2,678,135
- Net total costs to multi-payer demonstration programs = \$7,470,053 – \$8,970,053
- Net total start-up plus 4-year costs per 10% market share[†] = \$747,005 – \$897,005
- **Net average annual costs (after start-up) per 10% market share[†] = \$186,751 – \$224,251**
- *Using actual control practices may add up to \$10,000/yr per 10% market share, depending on number and complexity of measures evaluated (may be within national evaluator capabilities)*

Annual Detail

Start-up (year 1 of the grant, through February 21, 2011)

Central costs	288,873
CHIPRA funding	(169,800)
Net central costs	119,073
Practice incentives	0
Net total costs	119,073
Cost per 10% market share	\$11,907

(Note: costs per 10% market share of insured patients are shown to facilitate calculation of estimated cost per payer)

low est. / high est. figures reflect potential range of number of participating primary care FTEs (30-40)

Year 1 of demonstration (2/22/11 – 2/21/12)

Central costs	1,262,535	
CHIPRA funding	(529,965)	
Net central costs	732,570	
	low est.	high est.
Practice incentives	1,360,000	1,760,000
Net total costs	2,092,570	2,492,570
Cost/10% mkt share	\$209,257	\$249,257

Year 3 (2/22/2013 – 2/21/2014)

Central costs	1,260,823	
CHIPRA funding	(654,836)	
Net central costs	605,986	
	low est.	high est.
Practice incentives	1,360,000	1,760,000
Net total costs	1,965,986	2,365,986
Cost/10% mkt share	\$196,599	\$236,599

Year 2 (2/22/2012 – 2/21/2013)

Central costs	1,239,481	
CHIPRA funding	(652,461)	
Net central costs	587,020	
	low est.	high est.
Practice incentives	1,360,000	1,760,000
Net total costs	1,947,020	2,347,020
Cost/10% mkt share	\$194,702	\$234,702

Year 4 (2/22/2014 – 2/21/2015)

Central costs	1,075,549	
CHIPRA funding	(671,072)	
Net central costs	404,477	
	low est.	high est.
Practice incentives	1,060,000	1,360,000
Net total costs	1,464,477	1,764,477
Cost/10% mkt share	\$146,448	\$176,448

† assumes 100% payer participation – if unable to achieve that, will negotiate with participating payers and/or modify the budget to match the funding available.

Frequently Asked Questions and Answers about the Proposal

Q. How will the funds to support this demonstration be counted in our medical loss ratio calculation? A. To our knowledge, the final rules have not been approved but the draft proposed by the National Association of Insurance Commissioners (NAIC) in June counted such expenses as medical loss. An article in the New England Journal of Medicine (363:20;1883-85, Nov. 11) suggests that that stipulation remains in the rules that are likely to be approved.

Q. We get many requests to fund demonstrations – why should we support this one? A. This proposal brings together a unique set of resources for implementation and evaluation, leverages funding from a grant, and is large enough (60-80,000 patients) and long enough (3½ yrs.) to test both the short- and medium-term impacts of the interventions. With multi-payer involvement, participating clinicians' engagement will likely be much greater than if only one or two payers (and their insureds) are involved. This proposal is supported by the Utah Health System Reform Task Force and, with the other two demos, may satisfy the state's current desires for payment reform experimentation. And, changes are coming – this demonstration will offer evidence of what changes will, and won't, work.

Q. What would the practices do with the direct compensation? We're not interested in increasing physician income. A. Funding will not be used to increase physicians' personal income and practices' budgets must be pre-approved to assure that use of the direct compensation will adhere to the Medical Home-related aims described on pages 4-5 of the proposal. Specific uses might include: purchasing electronic systems to augment their EHR's functionality; hiring additional staff to coordinate care, implement QI strategies, expand access, etc.; or paying for clinician time to provide care in currently uncompensated forms (e.g., electronic visits, care conferences), etc. Planning for sustainability will be a critical component of the budgeting, particularly for years 3 and 4. We will hold practices accountable for their approved budgets.

Q. What are subspecialists doing in a Medical Home project? A. The principles of medical home – continuity, access, family-centered, comprehensive – should apply to all of the care children receive. Patients, particularly those with chronic and complex conditions, often receive care in multiple settings from multiple clinicians. Expert knowledge, patient information, and care plans should be shared and collaboration supported among the various clinicians involved, engaging them and families in what might be called a “medical village.” Efforts might include supporting comprehensive primary care for conditions like chronic abdominal pain, headaches, seizures and mental health disorders. For some patients at some points in time (e.g., right after solid organ transplant, during some chemotherapies, those with cystic fibrosis), we may focus on enabling subspecialty or multi-disciplinary clinics to offer key elements of primary care. Our demonstration will seek and test approaches and systems to achieve optimal coordination, collaboration, and medical home access.

Q. But kids aren't expensive to start with. How will you generate meaningful savings? A. We believe that we will demonstrate both reduced costs compared to non-intervention practices and improvements in care and outcomes, even with this lower cost patient population. Our results should therefore be that much more compelling and replication of our interventions in adult populations will likely result in much greater cost savings.

Q. Expenses in Utah are already among the lowest in the country. Where will you find costs to cut? A. Utah's low healthcare costs represent a substantial challenge that we acknowledge. Nevertheless, we believe that our interventions will find and address numerous opportunities to coordinate and improve care, provide care in more efficient settings and ways, avoid unnecessary and unwarranted care, and prevent the need for emergent and otherwise overly expensive care. A further challenge is that costs of care may increase initially, with practice teams doing a better job of identifying needs and implementing preventive measures, but we believe that the project will be long enough to demonstrate the resulting impact on patient outcomes and subsequent cost reductions.

Q. So how much will this really cost us? A. That will depend on two factors: 1) the number of pediatricians participating, which will depend on which practices are chosen, and 2) your market share among the insured patients in the selected practices. On page 8, the costs are detailed for the project overall and by each 10% market share, showing the range between the low and high estimates of the number of pediatricians that will participate. For example, if 30 pediatricians participate, the average annual cost for a payer with a 10% market share would be \$186,751. We will use the selected practices' payer mixes for the past 12 months to calculate the market shares. We recognize that we may not get agreement from all the potential payers, in which case we will work with the supporting payers to determine how much we can accomplish with the funding available.

Q. How can we contribute to or influence the direction of this project? A. We look at this demonstration as a collaboration with the multi-payer group and are anxious to improve it with your input, both before and during its implementation. We are open to discussion and negotiation on all aspects of the proposal except the amount of grant funding, which is fixed. We believe that the proposed demonstration is just large enough to adequately test the interventions, that the interventions are intense enough to make a substantial difference, and that the evaluation will be robust enough to measure the differences. But we want to hear your ideas and recommendations for improving the interventions, evaluation, cost structure, etc.

Q. What happens when the grant funding is gone? A. The costs of the demonstration are substantially greater than what would be needed to sustain the interventions. This is partly because we need to develop, test, and improve the interventions and partly to pay for the evaluation of the project. We intend to transform the delivery of pediatric care among the participating practices and to learn how to spread that transformation more broadly. We expect that a number of other changes will take place in healthcare compensation and organization, even before the end of the demonstration. We hope that this project will inform some of those changes, and we expect those changes will result in compensation for most of the services that participating practices will implement. We also expect increasing support for the kinds of infrastructure and quality improvement efforts included in the demonstration and that practices will integrate those into their core business structures. It may be that more practices will become part of larger organizations or will develop such organizations (such as accountable care organizations), incorporating these approaches to meet the demands of patients, payers, and regulators. The central support system developed in the demonstration would either be absorbed as part of these larger organizations or could become an independent practice support/staffing/consultation agency that contracts with practices and organizations to provide the kinds of support we learn are effective and valuable.

Q. What makes you think you can pull this off? A. Since 2003, UPIQ has assisted over 180 primary care clinicians from 77 practices across Utah to improve the care they provide. We have offered 17 projects on topics including asthma, immunizations, developmental screening, autism, and obesity and we have trained 20 practices in components of medical home, focused on children with special health care needs. UPIQ is the second state-based pediatric improvement partnership and a founding member of the National Improvement Partnership Network. UPIQ's partners include Utah Medicaid and the Department of Health, the University of Utah, *HealthInsight*, the state chapters of the American Academy of Pediatrics and American Academy of Family Physicians, Intermountain Healthcare, Family Voices, Voices for Utah Children, and others. The CHIPRA grant brings substantial support, as well as national scrutiny and expert evaluation resources. This proposal brings together a unique set of local resources, including the All-Payer Claims Database, *HealthInsight* and its Regional Extension Center for health information technology, the Medical Home Portal (www.medicalhomeportal.org) to provide clinical decision support and access to community services, and, we hope, the committed collaboration of several, if not all, Utah insurers. Utah Medicaid and Public Employees Health Plan have already committed to participate in the demonstration. We look forward to working with the remaining payers to "get to yes." For more information about UPIQ, visit www.upiq.org – a brief (well, sort of) description of UPIQ can be downloaded from the home page or the 'About UPIQ' page (click on 'UPIQ Brief').

Practice selection criteria

Practices will be selected for participation in the Utah Children's Medical Home Demonstration (UCMHD) based on their responses to a request for application (RFA) that was distributed in early November 2010 and interviews with the practice to be completed before Christmas. The RFA will outline the activities and commitment that will be expected of practices, as well as the benefits and compensation they will receive.

Practices will be selected as "offices," i.e., a single physical space in which all clinicians share the facility, staff, management, billing/scheduling systems, and an electronic medical/health record and are able/willing to collectively agree to the terms of the demonstration.

Requirements – Practices must:

- Include at least one board-certified pediatrician and provide care exclusively to pediatric patients (a participating practice may share a facility, systems, and/or some staff with other specialties, but must be able to implement the demonstration's interventions and report data independently of the other specialties).
- Identify a "physician champion" who will lead the practice's involvement in the UCMHD and has obtained commitment from the other clinicians and the office staff leadership to active participation
- Accept both established and new Medicaid-insured patients
- Accept both established and new CHIP-insured patients, unless restricted from doing so because of lack of inclusion by CHIP-contracted insurers
- Use an electronic medical/health record that is capable of (*HealthInsight* will assist in evaluating these criteria):
 - interfacing with the Utah clinical health information exchange (cHIE)
 - recording selected clinical and quality measures in discrete, coded fields
 - exporting selected clinical, quality, and utilization measures or enabling their extraction by the *EHR Measure Calculator*
- Have broad-band internet access and be willing to participate in electronic meetings
- Provide space for Medical Home Coordinators (MHC) to use when present at the practice that offers ready access to them by clinicians and with phone and internet access and sufficient privacy for patient-related phone conversations; use of exam or other room for face-to-face meetings with families, and be willing to integrate the MHC as a member of the practice's staff
- Identify staff who will be responsible for facilitating and assisting in data collection
- Identify (not necessarily before application) a Parent Partner to function as outlined
- Agree to participate for the duration of the UCMHD (intervention through Nov. 2015, evaluation complete by Feb. 2015)

Preferences – these criteria will drive selection among practices that meet all requirements:

- Higher proportions of Medicaid- and/or CHIP-insured patients
- Previous experience in implementing medical home and quality improvement (QI)
- Level of commitment among clinicians and office management staff
- Practice size, payer mix, geography, patient age distribution – the aim will be to include practices that represent some variety among these characteristics

Practice Budget – practices will submit a proposed budget for how they would use the direct compensation. The logic, thoughtfulness, and creativity of the budget will be a factor in practice selection. The project leadership will work with selected practices to refine the budget and assure that it includes measurable products or outcomes against which implementation can be evaluated.

Appendix

A **Children's Health Insurance Program Reauthorization Act (CHIPRA) Quality Demonstrations grant** was awarded in February, 2010 to the Utah and Idaho Medicaid/CHIP programs by the Centers for Medicare and Medicaid Services (CMS), support establishment of the **Children's Healthcare Improvement Collaboration (CHIC)**. Major partners in the CHIC include:

- Utah Department of Health (UDOH)
 - Division of Medicaid and Health Finance
 - Office of Healthcare Statistics
 - Division of Family Health and Preparedness
 - Bureau of Children with Special Health Care Needs
- Idaho Department of Health and Welfare
- University of Utah Departments of Pediatrics and Department of Biomedical Informatics
 - Utah Pediatric Partnership to Improve Healthcare Quality (UPIQ)
 - Medical Home Portal (www.medicalhomeportal.org)
- Utah Legislature
- Intermountain Healthcare
 - Primary Children's Medical Center's Pediatric Continuum of Care Managers (PCCM) program
 - Institute for Health Care Delivery Research
- *HealthInsight*
- Utah Clinical Health Information Exchange (cHIE) and Idaho Health Data Exchange (IHDE)
- Utah and Idaho Chapters of the American Academy of Pediatrics
- Utah Family Voices, Idaho Parents Unlimited, Voices for Utah Children

CHIC's objectives are organized by categories offered by the granting agency:

Category B – Promote the Use of HIT in Children's Health Care Delivery

- Optimize adoption and meaningful use of EHRs and HIE linkages by primary and sub-specialty child health practices; increase access to and use of HELP2 to support care coordination & collaboration
- Develop interfaces between Utah's and Idaho's health information exchanges and with public health data sources (e.g., immunization registries) in each state
- Implement tools and methodologies to extract and report pediatric quality measures from EMRs
- Expand the Medical Home Portal (www.medicalhomeportal.org) to better support clinicians and families with information and resources to improve care and access to services
- Develop a Pediatric Patient Summary tool that will collect, filter, and collate clinical data from HIEs to assist clinicians in maintaining up-to-date patient information to guide clinical decision-making, focused on children with chronic and complex conditions

Category C – Evaluate Provider-Based Models ... Improve Children's Healthcare Delivery

- Collaborate with and emulate Intermountain Healthcare's Pediatric Continuum of Care Managers program; "embed" Medical Home Coordinators in primary and sub-specialty care practices to support coordination of care and quality improvement
- Train and assist primary and sub-specialty child health practices in implementing systems to support the Medical Home model, care coordination, and ongoing measurement-driven QI
- Support Parent Partners in participating practices to assist families in accessing services/support
- **Include the demonstration among those of Utah Health Reform Task Force**, expanding it to experiment with payment models

Category E – Development of State/Regional Models for a National Quality System

- Offer 1-2 UPIQ Learning Collaboratives per year; provide Maintenance of Certification credit
- Develop an Improvement Partnership in Idaho to guide, assist, and support practice-based efforts to improve quality around common clinical problems
- With the Utah Pediatric Partnership to Improve Healthcare Quality (UPIQ) and the Idaho Improvement Partnership, develop an enduring, regional improvement network
- Train pediatric residents in QI and Medical Home to help perpetuate systems for improvement

Appendix (continued)**Selected Bibliography**

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