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July 7, 2023

The Honorable Cathy McMorris Rodgers, Chair
House Energy and Commerce Committee
2125 Rayburn House Office Building
Washington, DC 20515

The Honorable Mike Crapo, Ranking Member
Senate Finance Committee
219 Dirksen Senate Office Building
Washington, DC 20510

Dear Chair McMorris Rodgers and Ranking Member Crapo:

On behalf of the nation's children's hospitals and the patients and families we serve, thank you for the opportunity to respond to your request for information (RFI) on drug shortages. We appreciate your efforts to ensure the nation is better prepared to respond to future drug shortages and encourage you to prioritize the distinct needs of children, who represent 25% of the total U.S. population. We strongly support efforts to strengthen and stabilize the nation's supply chain to forestall – and address – shortages, particularly those that could affect children's health, to help ensure that our nation's most vulnerable patients have access to safe and effective health care.

The more than 200 children's hospitals that comprise the Children's Hospital Association (CHA) are dedicated to the health and well-being of our nation's children. Children's hospitals advance child health through innovations in the quality, cost and care delivery—regardless of payer—and serve as a vital safety net for uninsured, underinsured and publicly insured children. Medicaid, on average, provides health insurance coverage for half of children's hospitals patients and for some children's hospitals patient mix, closer to three-quarters. Though children's hospitals account for only 5% of hospitals in the U.S, they account for about 45% of all hospital days for children on Medicaid. We are regional centers for children's health, providing highly specialized pediatric care across large geographic areas.

Our response to the RFI focuses on critically important pediatric-specific considerations that must be addressed in any policies to strengthen and stabilize the nation's supply chain to forestall shortages, particularly those that could affect children's health, to help ensure that our nation's most vulnerable patients have access to safe and effective health care. Below please find our detailed responses to specific questions in the RFI.

1. How would you define the scope and impact of the recent and ongoing U.S. drug shortages?

Children's hospitals have long faced shortages of critical drugs and related supplies that their vulnerable patients rely on for treatment and recovery. A drug shortage is particularly challenging in children's health care because pediatric care requires specialized therapies and the appropriate equipment for safe administration. There are also fewer manufacturers of pediatric-appropriate drugs and related supplies, which means the pediatric supply chain is easily disrupted. As a result, children's hospitals are disproportionately impacted by drug shortages compared to non-pediatric hospitals. Pediatric essential drugs, such as antineoplastics, TPN components and plasma products used to treat critical conditions including cancer and immune deficiencies, are more likely to be impacted by shortages. The recent surge in respiratory syncytial virus (RSV), influenza, and COVID-19 cases, the so-called "Tripledemic," stretched pediatric drugs like albuterol to the breaking point.

- **What are the impacts of recent and recurring shortages of generics and other critical medicines on patient care?**

Shortages impact pediatric care protocols when drugs or supplies must be changed to alternatives, or worse yet, delayed or canceled all together because an appropriate substitute specifically geared for pediatric patients is not as readily available. Sometimes the location of a child's care must abruptly change—care intended to be provided in a community setting close to a child's home may have to be moved to a setting further away, requiring parents to take off work and children to miss school. Furthermore, drug and supply shortages can lead to adverse clinical outcomes for pediatric patients, such as increased rates of drug errors and possible disease relapse, with potentially detrimental impacts on their long-term health and well-being.

- **For drugs currently in shortage, what percentage of their market is reimbursed through public payers, such as Medicare and Medicaid?**

Medicaid is the backbone of coverage for children. Medicaid and CHIP programs cover nearly 50% of children and youth ages 18 and under, as compared to less than 23% for non-elderly adults. Most of the nation's sickest children are covered by Medicaid, including more than six million children with special health care needs. On average, Medicaid covers half of children's hospital patients; for some children's hospitals it covers over three-quarters of their patients. Medicaid also plays a significant role in providing coverage to children with cancer, covering one in three children who are diagnosed.

Currently, some state Medicaid programs are requiring providers to bear a large portion of the costs associated with acquiring and administering drugs and biologics as part of specialized treatment regimens. Medicaid might either pay a flat fee for a hospitalization that fails to take drug costs into account or reimburse for the product itself well below acquisition cost. As a result of these payment policies, children's hospitals take a financial loss with every Medicaid patient who needs one of these life-saving drugs. In the long term, the financial impact of these policies could lead to longer wait times for needed drugs and poorer health outcomes. Congress should require CMS to examine these practices and their impact on children's access to needed drugs.

2. What market and economic conditions undermine pharmaceutical supply chains or the availability of drugs? Please discuss any specific barriers in public payment programs.

Market and economic conditions create significant challenges in pediatric health care as drugs intended for children are unique. There are fewer manufacturers of pediatric drugs which makes the supply chain less resilient. A recent report¹ finds that more than half of pediatric drugs had only one to two manufacturers currently supplying the dosage form most used by pediatric hospitals. Of the essential medication manufacturers utilized by children's hospitals, only 15% of them are pediatric-only suppliers.

Furthermore, children's hospitals spend more hours managing shortages than non-children's hospitals—51 hours compared to 36 hours per drug shortage. This additional time is often dedicated to compounding replacement products into safe pediatric dosage forms and as a result, they are more than twice as likely to hire additional staff.

¹ [Pediatric Drug Shortage Trends and Best Practices for Mitigation Strategies](#). Children's Hospital Association and Vizient. 2020

Children's hospitals report that, on average, the cost to manage one drug shortage from onset to correction is approximately \$50,000, in addition to the actual cost of the drug itself.

Congress should consider ways to work with CMS to address low Medicaid reimbursement rates that make it financially problematic for children's hospitals to secure certain drugs and provide them to the children who need them. It is essential that the pricing, distribution and reimbursement structures for pediatric drugs do not jeopardize patient access or health outcomes.

In addition, Congress should create avenues for early communications between all payers with a focus on payment and access strategies. Improved coordination between state Medicaid programs, manufacturers, patients, specialty pharmacies and the FDA as pediatric drugs come to market is critical.

3. What are the regulatory challenges to manufacturing drugs in the United States, as compared to other countries? Please specify which agency issued and enforced such regulations.

Vulnerabilities in the pediatric drug supply chains exist where there is limited manufacturing diversity of any part of the manufacturing/distribution process. While this is a problem throughout the supply chain, it is particularly problematic in pediatrics, which already has a limited supplier market. There are fewer manufacturers of pediatric-appropriate supplies, which means the pediatric supply chain is easily disrupted. We support FDA authorities to require manufacturers to develop and share risk management plans, particularly for pediatric essential medications, and identify alternate suppliers and manufacturing sites to be used in times of *anticipated* supply disruption.

Furthermore, manufacturer and distributor transparency must be ensured throughout the pediatric supply chain, including the location of production, as well as an immediate and clear timeline on product availability. The absence of this timely information hinders proactive steps that providers can take to prevent and mitigate shortages. Because there are fewer sick children as compared to adults, the data surrounding the pediatric supply chain often does not rise above even minimally used adult therapies, therefore pediatric supplies are often not prioritized in a crisis, creating a secondary pediatric emergency.

4. How can federal agencies, such as Centers of Medicare and Medicaid (CMS), better address the economic forces driving shortages? Are these agencies using their current authorities effectively?

Congress should work with CMS on ways to strengthen both Medicaid and Exchange plan reimbursement for pediatric drugs to help ensure that children have access to the care they need. Pricing levels and reimbursement should account for all aspects of drug development as well as their delivery to the patient, including risk of handling and professional services, pediatric formulations and dosing and needed supplies to administer the drug, including pediatric-sized syringes, etc.

Furthermore, we urge Congress consider the impact of Medicare policies on other programs and to work closely with CMS, pediatric providers and other child-focused stakeholders on drug pricing policies that will advance child health due to the reliance of children on Medicaid coverage for care. Medicaid and private payers often adopt Medicare rules and procedures without evaluation of their impact on pediatrics. Despite the low numbers of children covered by Medicare, its policies can affect all children, even though the policies are not developed with children in mind.

We also encourage Congress to work with CMS on ways to limit payers' ability to use delivery methods that compromise patient care and can lead to inadequate provider reimbursement. Some payers are beginning to dictate coverage through a white bagging-only method, while some states and hospitals are limiting the use of white bagging due to legal and quality concerns. When white bagging is mandated, obtaining the appropriate authorizations for the medications becomes a time-consuming and complicated endeavor. Mandatory white bagging also requires increased provider time and patient family engagement even before the drug is able to be shipped.

In addition, we encourage Congress to work with a broad set of agency stakeholders to identify mechanisms to establish reasonable pricing for therapies that balance investments in research and development, manufacturing, distribution, and reimbursement structures. For example, public-private partnerships are essential to the development of new therapies, especially those aimed at treating rare pediatric diseases. Funding from government sources, such as the National Institutes of Health, as well as children's hospital research foundations, complement private investment throughout the pediatric drug development and clinical trial process.

5. How does the current generic drug reimbursement structure in federal programs, including those programs' mandatory discounts and rebates, contribute to drug shortages, and what solutions exist?

Increasingly, payers are dictating specific distribution methods for products in an attempt to control costs, taking away a hospital's ability to pick what works best for their patients and their facility, and delaying access. Some payers are beginning to dictate coverage through a white bagging-only method, while some states and hospitals are limiting the use of white bagging due to legal and quality concerns. White bagging has caused a multitude of issues for patient families and the providers who care for them – from medication procurement to drug delivery to patient safety and care. For example, administrative and delivery delays, inadequate storage systems, shipping safety protections, lost shipments and a lack of coordination between the receipt of a drug and its dose administration schedule can result in improper dosing, medication errors or impeded access to the treatment. If drugs don't arrive to children in time due to delivery challenges, much-needed therapies for these patients can be delayed. Issues with delivery and the increased need for provider and patient engagement in this process creates an undue hardship on pediatric patients and their families who already made schedule accommodations, especially for those with complex medical conditions.

Pediatric-specific considerations may not be taken into account under payers' policies related to generics. Off-label medications are frequently prescribed to children, particularly for unique child populations, such as children with chronic or rare diseases. It is critical that payer reimbursement policies do not limit timely access to these types of critically important drug therapies, which may be the only available treatment option for children, even if an exceptions process is allowed.

The development of payer procedures can take longer for pediatric drugs—both generics and non-generics—compared to adults, which can lead to delays in patient access and exacerbate shortages. For example, under Medicaid—which covers close to half of all children, including 3.4 million children in military families and 1.7 million who qualify due to a disability—states have flexibility to administer and manage their pharmacy benefit. Typically, states with Medicaid managed care allow the health plans to establish the specific approval standards for access to drugs. However, the plans often take a substantial amount of time to develop and operationalize these utilization controls, which can impact access to cutting edge cures for critically ill children.

Congress should create avenues for early communications between state Medicaid programs, manufacturers, patients, specialty pharmacies and the FDA with a focus on payment and access strategies. Advanced information

exchanges can help ensure that public payers are not caught off guard with new market introductions and expedite children's access to therapies.

6. Given that supply chain issues can trigger manufacturing delays and disruptions that result in shortages, are further incentives necessary to address manufacturing issues?

Children's hospitals experience shortages of pediatric supplies earlier than adult hospitals because manufacturers and distributors consider pediatric utilization to be less profitable. Products dedicated to a small, specific patient population do not provide the same return on investment as adult products, leading manufacturers to place less of a priority on those products in supply chain planning. Lower profits risk disincentivizing the manufacturing of drugs and may hinder access to care for children, especially children with medical complexities. Congress should work with federal agencies on reducing the risk of pediatric shortages by encouraging proactive shortage mitigation plans and/or competition in production of pediatric products that are often sole-sourced or under-resourced. It is also crucial that Congress strengthen funding support for research and funding on pediatric drugs.

7. What role, if any, has growth in the 340B program played in drug shortage trends?

The 340B Program supports safety net providers, such as children's hospitals, in their mission to serve low-income and underinsured patients regardless of their insurance status. Children's hospitals depend on the 340B Program to provide vulnerable patients with access to life-saving medications. The support provided by the 340B Program—the result of pharmaceutical manufacturers reducing outpatient drug prices and involving no direct congressional appropriation—enables children's hospitals to help more vulnerable patients, improve access to care and provide more comprehensive services. We believe that the 340B Program is working as intended to help safety net providers, including the more than 50 children's hospitals that take part in the program.

In addition, multiple pharmaceutical manufacturers have taken steps to restrict 340B contract pharmacy arrangements. Children's hospitals utilize contract pharmacies to help patients more easily access medications within their communities. However, some companies are imposing overly burdensome requirements while others simply limit the use of contract pharmacies. These harmful policies prevent timely access to drugs that children need for treatment.

8. Would innovative CMS reimbursement models for drugs at risk of shortage status better allow manufacturers of these drugs to meet production and patient demand? What factors should be incorporated into any model seeking to address shortages?

Congress should work with CMS on ways to strengthen Medicaid and Exchange plan reimbursement for pediatric drugs to help ensure that children, including children with chronic or complex medical conditions, have access to the care they need. Pricing levels and reimbursement should account for all aspects of their development as well as their delivery to the patient, including risk of handling, professional services (e.g., compounding/infusion/counseling) etc.

In addition, we encourage exploring the use of value-based payments for drugs. One approach could be to allow state Medicaid programs to enter time-limited risk-sharing value-based agreements with manufacturers of certain drugs. Under these arrangements, a state could stop payment if the therapy does not meet certain clinical expectations.

As Congress and CMS examine drug pricing policies, it is important to recognize how Medicare reimbursement models lead to potential implications for pediatrics. Despite the low numbers of children covered by Medicare, its policies can affect all children, even though they are not developed with children in mind. Medicaid and private payers often adopt Medicare rules and procedures without evaluation of their impact on pediatrics.

9. How do existing inflation penalties in Medicaid and Medicare create additional barriers for generic manufacturers, leading to drug shortages? How does the discretion given to CMS to reduce or waive these penalties for drugs on the FDA's Drug Shortage list, as well as certain drugs facing severe supply chain disruptions, introduce additional uncertainty into drug development, and what can be done to remedy that uncertainty?

The drug market is not static and the demand for pediatric drug products and risk for shortages can and will change over time. We urge Congress to ensure that an appropriate accounting of pediatric drugs is included on the FDA drug shortages list. We also recommend that the FDA use the American Society of Health-System Pharmacists' shortage list as the industry standard. Congress should require the FDA to adjust its drug shortages list to provide a timely and accurate accounting of pediatric populations and pediatric drug formulations, including the potential for regional shortages, so that alternate suppliers and manufacturing sites can be identified. Without a more transparent and resilient pediatric drug supply chain, children can experience delays in receiving necessary health care services, potentially resulting in medical emergencies or negative health outcomes.

10. How might uncertainty in the drug coverage process, particularly as it relates to National Coverage Determinations (NCD) and coverage paradigms like Coverage with Evidence Development (CED), affect competition and, ultimately, the supply of drugs? What can be done to promote greater certainty in that process for FDA-approved drugs?

Children's hospitals work tirelessly on studies, trials and innovations that advance knowledge and access to needed treatments for children of all ages. However, their promising work is not always translated into accessible bedside treatments due to manufacturers' and payers' policies that can impede children's access to these very treatments. Payers, in particular, often require prior authorization, may establish a step therapy process for a drug, or may subject a drug to peer-to-peer reviews. In addition, each payer has its own discrete approval and payment policies and procedures and are increasingly placing additional clinical monitoring requirements on drugs that delay approval of their use.

In addition, some payers are beginning to dictate coverage through a white bagging-only method, while other states and hospitals are limiting the use of white bagging due to legal and quality concerns. For example, administrative and delivery delays, inadequate storage systems, shipping safety protections, lost shipments and a lack of coordination between the receipt of a drug and its dose administration schedule and mechanism can result in improper dosing, medication errors or impeded access to the treatment.

Congress should consider ways to work with CMS to address low Medicaid and commercial reimbursement rates and payment policies that make it financially difficult for children's hospitals to secure those drugs and provide them to the children who need it. Congress should also work with payers to ensure that utilization controls and payment mechanisms do not unnecessarily impede access to needed therapies and explore strategies to address quality and safety concerns related to their medication delivery mechanisms.

11. Are there any guardrails that Congress should to consider related demonstration projects, including via the CMS' Innovation Center, that would help protect against drug shortages? Are there any proactive demonstrations that would prevent drug shortages?

Proactive demonstrations to prevent pediatric drug shortages should include collaborations across government agencies, healthcare providers and industry partners. For example, earlier this year, children's hospitals across the country started to see a potential shortage in albuterol, which prompted information gathering with hospitals and suppliers to learn more about its cause and mitigation strategies. As the manufacturers of albuterol in the U.S. had to pause production, there was an uptick in off-season RSV, flu and COVID-19 that created a shortage when it was needed most. A 503B outsourcing facility that provides compounded pediatric medication worked with children's hospitals to secure the active pharmaceutical ingredients for albuterol. Children's hospitals also worked closely with the FDA to ensure the supply quickly made it through U.S. Customs. Partnerships among hospitals, government agencies and the private sector was successful and proved crucial when ensuring a stable supply chain for pediatric patients and should be explored and supported by CMS via demonstrations and other mechanisms.

13. What factors would lead to a generic drug receiving approval but not coming to market?

Inadequate reimbursement from payers risks disincentivizing bringing generic pediatric drugs to market and may hinder access to care for children with medical complexities. Due to a low return on investment, fewer manufacturers pursue generic-abbreviated new drug applications for pediatric populations. Congress should work with CMS on the establishment of appropriate reimbursement for pediatric drugs to help ensure that drugs coming to market are available to children in a timely manner. The determination of adequate prices and reimbursement levels must account for all aspects of their development as well as their delivery to the patient, including risk of handling, professional services (compounding/infusion/counseling) etc.

14. Are there any other issues leading to drug shortages that we have not considered in this RFI?

Enhancing research and innovation to help bolster the pediatric drug supply, potentially prevent shortages and ensure the supply chain can adapt quickly in the event of a pediatric drug shortage is critical. We urge Congress to invest in pediatric-focused research, development and procurement of drugs, and to require the development of targeted strategies and guidance that can ensure timely access to sufficient pediatric-appropriate medications and a quick response to shortages. Congress should require resources to be directed to research on pediatric dosing and formulations that are already approved for adults. Congress should also require properly dosed pediatric medications and delivery mechanisms to be available and ready for rapid deployment. Finally, there should be incentives and/or requirements for manufacturers of pediatric essential medications to always have a Risk Management Plan that supports alternative manufacturing if the primary supplier will experience a disruption.

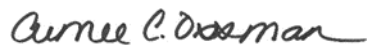
Furthermore, it is essential that children of all ages are included in clinical research to ensure that they benefit and do not experience unintended harm. We need to better understand how many—and which—children are enrolled in trials to develop effective recruitment and retention strategies. Congress should work with the federal biomedical research enterprise to develop a requisite data collection and reporting structure that would allow for an accurate picture of how many children are enrolled in clinical studies and trials and where gaps exist. This data should be broken down by pediatric subgroup (e.g., neonates, infants, children, adolescents, etc.) to provide a more complete picture of which populations of children are underrepresented.

In addition, we are facing a severe pediatric health care workforce shortage that is not only affecting bedside health care workers, but also our pediatric clinical and research workers. As you consider how best to address barriers to innovation, we urge you to consider ways to strengthen our pediatric researcher workforce pipeline, including in the area of pediatric pharmacy. Pediatric pharmacists play a critical role in research and drug discovery, advancing therapeutics that can meet the unique needs of kids. As the workforce ages, it is critical to cultivate the next generation of pediatric pharmacologists to develop clinical trials and accelerate discovery.

Finally, efforts to address drug shortages throughout government must be aligned, coordinated, strengthened and adequately funded to specifically support the needs of pediatric patients. Developing a more efficient and resilient pediatric drug supply chain is essential to ensuring that our child patients receive the highest quality products in a timely manner.

Thank you again for the opportunity to provide feedback. We look forward to working with you to ensure the needs of children are met when addressing drug shortages. Please contact Natalie Torentinos at Natalie.Torentinos@childrenshospitals.org or (202) 753-5372 should you need more information.

Sincerely,



Aimee Ossman
Vice President, Policy
Children's Hospital Association