PROJECT INFORMATION

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Nurse Support for Children and Their Parents Returning Home from the Hospital – The H2O Study

Principal investigator

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Organization

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What was the research about?

When a child is leaving the hospital, hospital staff give parents instructions on how to take care of their child's health at home. But once at home, many parents struggle with managing health problems that arise, including who and when to call for help.

In this study, the research team wanted to learn if giving parents extra support from a nurse after a child's hospital stay decreased how often children returned to the hospital. The team compared usual care only with two ways of giving extra support:

- **Home visit.** A nurse visited the parents' home soon after their child's hospital stay.
- **Phone calls.** A nurse called the parents soon after their child's hospital stay.

What were the results?

Within one month of going home from the hospital, children who had a nurse home visit returned to the hospital more often than children who had usual care only. The nurse phone call didn't affect how many of the children returned to the hospital.

Compared with usual care only, neither the nurse visits nor the phone calls made a difference in

- How parents coped with the stress of having their child home from the hospital
- How long it took to get back to a normal routine

Two weeks after children went home, parents of children who had a nurse home visit or a nurse phone call remembered more health problem warning signs than those who had usual care only.

Who was in the study?

The nurse home visit study included 1,500 children. Of these, 61 percent were white, 29 percent were African American, and 6 percent were Hispanic. The average age of children was 2, and 52 percent were boys.

The nurse phone call study included 966 children. Of these, 64 percent were white, 23 percent were African American, and 4 percent were Hispanic. The average age was 2, and 52 percent were boys.

All children were going home from a children's hospital in Ohio and had at least one parent who spoke English.

What did the research team do?

The research team assigned children in each study by chance to either receive extra support or usual care.

For children who had home visits, the visits took place within four days of going home from the hospital. Nurses checked to see if each child was getting better. The nurse gave the child's parent a list of warning signs and told parents to seek medical care if their child had any of the signs.

For children who had phone calls, a nurse called parents at home two to four days after going home

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from the hospital. During the call, the nurse went over the same information as the home visits.

Usual care included directions for parents about getting their child follow-up medical care and providing any prescription medicines the child would be taking.

For both studies, the research team called parents 14 to 23 days after their children went home. The team asked about healthcare use and life at home.

Parents and home-visit nurses gave feedback to the research team throughout the two studies.

What were the limits of the study?

The studies took place at one children's hospital and included only children with at least one parent who

spoke English. Results may differ at other hospitals or for children whose parents don't speak English.

Future research could look at other ways to support children and their parents after they leave the hospital.

How can people use the results?

Hospitals can use these results when considering ways to support children and families after they leave the hospital.

To learn more about this project, visit www.pcori.org/Shah173.