

## Clinical and Financial Perspectives in NICU Care Management

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Session Topic: ***Clinical and Financial Perspectives in NICU Care Management***

Guest Speaker: Ellen L. Stang, M.D., FAAP

We were pleased to have Ellen Stang, M.D. attend the 17 th annual Medical Excess Claims Conference on Thursday, May 11, 2006. Dr. Stang is President and Chief Executive Officer of ProgenyHealth, which is located in Conshohocken, Pennsylvania. Dr. Stang is responsible for the strategic direction and daily operations of the company. She oversees all medical management and quality management activities and is chairperson of the Medical Advisory Board.

Dr. Stang began the session with a brief history of neonatology. In the late 1800's Dr. Pierre Budin noted that one in three babies were born prematurely and died shortly after birth. Because of the high mortality rate, Dr. Budin began researching the causes and recommended increased cleanliness (washing of hands for doctors and nurses) and recommended the use of egg incubators which lead to the use of the incubators used today.

Dr. Stang discussed the statistics on prematurity, defined A preterm @ and the different levels of low birth weight (i.e. low, very low, extremely low), and explained the levels of care in the NICU.

Dr. Stang discussed hospital charges for the diagnosis of prematurity. She did a comparison of inpatient hospital stays that indicated a diagnosis of prematurity and those that did not. Even though less than 10% of the total (4,301,000) had a diagnosis of prematurity, the charges for those with a diagnosis of prematurity exceeded the charges without this diagnosis by \$5 million dollars. Dr. Stang indicated that the average length of stay of an uncomplicated newborn was 1.9 days.

The average length of stay for a premature birth with the principal diagnosis of prematurity with low birth weight was 24.7 days. These figures were taken from various hospitals in the United States in 2001.

Some of the reasons given for variations in care contributing to cost increase included delays in enteral feedings, delays in attaining clinical milestones over the weekend and delays in discharge planning.

Dr. Stang indicated that 1/3 of Stop Loss dollars go to preterm babies. Other issues for the payor as relates to the financial considerations were: unplanned events, resource-intensive patients, shifting care costs and long term health care problems.

She also indicated that 25 percent NICU babies go on to have long term complications.

Dr. Stang then presented case examples. The first example was a full term infant born with severe respiratory distress at birth. Dr. Stang indicated that the infant received Nitric Oxide treatments and was hospitalized for 91 days. The total cost for the Nitric Oxide therapy was \$330,000. A sample billing was presented which showed that each Nitric Oxide treatment was \$10,307.25, and on some days the cost was \$11,235. Dr. Stang indicated that the typical cost for this therapy was between \$150 to \$600 per hour. Approved indications for the usage of Nitric Oxide therapy are for infants that are greater than 34 weeks gestation, have hypoxic respiratory failure with pulmonary hypertension, and when conventional treatments have failed.

Dr. Stang presented a copy of a claim for NICU inpatient charges which showed that the patient was hospitalized for 56 days. The room charges for this confinement were \$4,767.00 for Newborn Level IV. The take home point was that the claim should reflect step down in level of care which correlates with clinical progression and recovery prior to discharge. This bill sample did not reflect a step down in the level of care. By discharge, the level should have been Level 1 with a charge of around \$1,000.00 per day. Another sample bill was presented which showed charges for Level 2 and Level 3 room and board where the charges were inflated. Dr. Stang indicated that for Level 3, the charges should be no more than \$2,500 per day. The hospital in this case was billing \$3,416. For Level 2, the charges should be no more than \$1,500 per day and the hospital was billing \$2,906.50.

Dr. Stang stressed the importance of early intervention at the TPA level for case management services.

The final portion of the presentation related to Medical Underwriting and Cost Projections. She discussed the factors that should be taken into consideration when setting reserves such as gestational age and birth weight of the infant, medical diagnoses at discharge, surgical procedures, DME, medications and high cost injectables and home nursing costs.

Dr. Stang concluded her session with a discussion about the future and where we are going. She provided a listing of current ongoing initiatives such as Healthy People 2010, increased use of Specialty Home Care Services and Regulation of Infertility and Assisted Reproduction. Dr. Stang also included in her opinion two goals of the health care community which should be Decrease in Health Disparities and Focus on Prevention and Prenatal Care.

She ended with the proverb " *From small beginnings come great things*" .