**GENE THERAPIES BRING HOPE TO PATIENTS WITH SICKLE CELL DISEASE**

*Sickle cell disease* is caused by a mutation in the β-globin gene. This causes sickle or crescent-shaped blood cells to clog blood vessels, preventing the normal flow of nutrition and oxygen throughout the body and leading to serious complications, including pain crisis and acute chest syndrome.

Gene therapies in the late stages of development have demonstrated an almost complete reduction in pain crisis as well as acute chest syndrome. Reducing these serious complications can help restore the quality of life in people with sickle cell disease and enable people to maintain more consistent and reliable employment, dramatically reducing income disparities.

The significant pain and frequent hospitalizations caused by this disease can impact employment. Pain from sickle cell disease may force patients to:

- Take unpaid time off or reduce work hours
- Take a leave of absence
- Stop working completely

Potential gene therapies for sickle cell disease can reduce pain and improve a patient’s quality of life. Gene therapies in the late stages of development have demonstrated an almost complete reduction in pain crisis as well as acute chest syndrome.

The full value of gene therapies may only be realized over a patient’s lifetime. That’s why our current reimbursement system needs to adapt and evolve to account for the long-term value of these therapies.