SAF Goal #5:	Ensure that every CIRM funded project completing a late- stage clinical trial has a strategy that enables access and affordability by all California patients, particularly underserved populations	
High-Level Questions	Regulatory Policy & Reimbursement Context with Option(s)	Considerations
I. How will CIRM align with CMS cell and gene therapy access model?	 CMS Framework has been established¹ DHCS (Medi-Cal) is lead agency for CGT Access Model Model provides a pathway for access to gene therapies for sickle cell disease Initially limited to Casgevy and Lyfgenia If additional Manufacturers receive FDA approval for gene therapies for SCD CMS may open a new application cycle to allow eligible Manufacturers to participate in negotiation with CMS. (p. 11) CIRM-funded gene therapy sickle cell programs should conduct evidence development (cost, efficacy, durability, safety) to support inclusion in the potential future CMS program. 	Consistent with CLIN-4 activities Need to document benefits beyond existing approved treatments CMS willingness for new application cycle(s)
	 Through a separate Notice of Funding Opportunity (NOFO), CMS will outline activities related to equitable access to care for which Model funding will be available to States under a Cooperative Agreement. The funding opportunity will be non-competitive, meaning that all States that participate in the Model and can meet the State requirements for Model funding will be able to receive funding. Two types of funding will be available under the NOFO Implementation Funding. Supports required and optional Model planning and implementation activities, such as staff time and infrastructure costs. For states that choose to partner with community-based/non-profit organizations 	DHCS actively developing CGT financing framework NOFO consistent with CCCE model creating leverage opportunities May contribute to the sustainability of CIRM IRFRA programs

¹ https://www.cms.gov/files/document/cgt-model-rfa.pdf

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	to carry out optional Model activities, states may also use implementation funding to pay for costs to such entities. 2) Milestone Funding. Available to States that achieve performance milestones related to increasing equitable access to SCD gene therapy and promoting multidisciplinary, comprehensive care for beneficiaries who are considering or receiving SCD gene therapy. CIRM should continue to engage DHCS including giving visibility to Infrastructure programs that could support a NOFO application. Alpha Clinics and CCCE Steering Committees should	
	be engaged to respond to DHCS partnership opportunities.	
II. What are the most impactful factors for achieving access and affordability?	 Payers have expressed more concern about the uncertainty in clinical durability than safety.² Experience suggests side effects or longer-term risks of gene therapy have been relatively minor among approved treatments Uncertain durability of effect has troubled payers is because they feel that the high prices is being set by implicitly, if not explicitly, by assuming that the durability of effect will be complete and everlasting. Prioritize durability assessment for coverage evidence development in CIRM CLIN programs. Entities with approved products are dedicating substantial resources to documenting the value of new treatments to support reimbursement.³ CMS recently cited the \$2.98 billion per year of sickle cell disease as a rationale for a pilot financing program.⁴ 	Opportunity to utilize conferences and workshops to identify critical reimbursement factors AAWG resources may support research to identify impactful factors for AA.
	 Develop support systems or infrastructure to enable researchers to perform health economics and outcomes research (HEOR) during clinical development. Information about value is a public good 	

https://icer.org/news-insights/press-releases/icer-and-newdigs-release-white-paper-analyzing-the-challenges-and-potential-policy-options-for-paying-for-gene-therapies/
 https://ashpublications.org/ashclinicalnews/news/7845/Cost-Benefit-Analysis-Favorable-but-Challenging
 https://www.cms.gov/files/document/cgt-model-rfa.pdf

High-Level Questions	Regulatory Policy & Reimbursement Context with Option(s)	Considerations
	that merits public investments in value assessment. ⁵ Emphasis should be placed on patient-centered approaches that account for the greater value that patients with severe illness place on improving their health. ⁶ Encourage and fund these activities in awards, requiring that innovators rely on up-to-date methods that comport with federal prohibitions of discriminating against the aged, sick, and disabled. ⁷ For instance, a nascent literature has already begun to apply Generalized Risk-Adjusted Cost-Effectiveness (GRACE) to gene therapy. ⁸	
III. What research is needed to understand the landscape for access and affordability?	 Evidence regarding (1) the cost burden and (2) and population disparities and inequalities of a disease condition should be documented. Cost burden and disparities were factors driving CMS's decision to implement the CGT access model: Medicaid is a disproportionate payer for individuals with SCD. SCD is a costly condition, particularly for the Medicaid program, as approximately 50-60% of people with SCD are enrolled in Medicaid.9 The total cost to the health system of SCD is estimated at \$2.98 billion per year in the United States.⁹ Individuals with SCD have inadequate access to specialized care and existing treatments, exacerbating the poor health outcomes and low life expectancy associated with SCD.¹⁰ CGT programs should document the cost burden / standard of care costs of the condition and disparities in access or care. Consider the potential for CGT to reduce disparities by alleviating the need for ongoing SOC treatments. 	Note option in IV to use CCCE research to inform access strategies.
	 Consider whether tools like ICER-Analytics can support comparative cost effectiveness¹¹ 	

https://healthpolicy.usc.edu/research/health-technology-assessment-in-the-u-s-a-vision-for-the-future/
 https://www.sciencedirect.com/science/article/abs/pii/S0167629619309208
 https://link.springer.com/article/10.1007/s10198-023-01659-7
 https://www.ispor.org/docs/default-source/intl2024/grace-scdispor-2024poster138047-pdf.pdf?sfvrsn=efc86964_0
 https://www.valueinhealthjournal.com/article/S1098-3015(18)33183-8/fulltext
 https://pubmed.ncbi.nlm.nih.gov/31600481/
 https://analytics.icer.org

High-Level Questions	Regulatory Policy & Reimbursement Context with Option(s)	Considerations
IV. What general policies within CIRM or could be developed to facilitate access and affordability?	 NIH is proposing a policy to require that licensees that succeed in bringing certain products toward market submit a plan outlining steps they intend to take to promote patient access. The proposed NIH policy suggests a range of potential strategies to enhance access and affordability. NIH indicates a final policy approach should be reasonable and not seek to force licensees into access obligations that obstruct commercial development or damage the viability and sustainability of a product in the market, while also balancing the need to promote access through reforms to various policies. The proposed NIH policy provides a framework for articulating an access and affordability strategy. If finalized, this planning framework will scale for the field of sponsored research. CIRM may leverage the advantages of this scaling while maintaining the ability to ensure that any specific requirement are consistent with CIRM's mission or policies. 	
	 The CCCE program will be well positioned to survey, research / identify barriers and access needs and strategies. 	
	Develop questions and develop survey / research instruments within CCCE program to identify barriers and solutions.	
V.What are the barriers to access and affordability for CGTs?	 The unpredictable number of rare disease patient results in actuarial risk or uncertainty for employers or payers. This risk may result in the exclusion of CTGs from health plan coverage particularly self-insured employers.¹² 	

 $^{12} \, \underline{\text{https://newdigs.tuftsmedicalcenter.org/precision-financing-solutions-for-durable-potentially-curative-therapies/\#gsc.tab=0}$

High-Level Questions	Regulatory Policy & Reimbursement Context with Option(s)	Considerations
	 Smaller insurers may deploy stop loss or other reinsurance policies to mitigate actuarial risk.¹³ As part of a CIRM-required Access Strategy (particularly for Rare Disease Programs), sponsor should consider options for sharing financial risk between health plan sponsors, manufacturer and (potentially) CIRM Patient Assistance Fund. For CIRM-funded rare disease programs, utilize CAP/MAP process to include participants that can advise on actuarial risk and possible mitigation strategies. 	
VI. At what stage should the applicants provide an access and affordability strategy?	 For any clinical program, there will be considerations related to (1) the indication being targeted and (2) therapeutic being developed. Collectively these considerations will impact the likelihood of success.¹⁴ Indication related considerations such as population prevalence, insurance coverage or mix, and standard of care options and costs may be predicted earlier stage. Price, efficacy and durability become evident during later stage clinical development. 	
	 Access and Affordability strategies may be crafted in a stepwise or tiered manner over of the life of the CIRM program with evidentiary milestones commensurate with the stage of development. CIRM could expect indication related considerations be fleshed out at an earlier stage as such considerations should be comparatively evident and should inform application evaluation and DEI planning. Strategies relating to market penetrance such as price, efficacy and durability might be considered prior to CIRM making a financial commitment to a pivotal trial. Same as above: For CIRM-funded rare disease 	
	programs, utilize CAP/MAP process to include	

¹³ https://newdigs.tuftsmedicalcenter.org/wp-content/uploads/2019/09/NEWDIGS Reinsurance 190916.pdf

https://icer.org/news-insights/press-releases/icer-and-newdigs-release-white-paper-analyzing-the-challenges-and-potential-policy-options-for-paying-for-gene-therapies/

High-Level Questions	Regulatory Policy & Reimbursement Context with Option(s)	Considerations
	participants that can advise on actuarial risk and possible mitigation strategies.	
VII. How can strategies be scaled if the therapy is successful?	 The proposed strategies above are intended to align with or leverage state and/or national policy initiatives (e.g. CA-DHCS, NIH, FDA etc.) Such alignment serves can result in operational efficiencies resulting from their widespread implementation and leverage non-CIRM resources for synergy and sustainability. CIRM programs may scale organically as the CGT Pilot, NIH Access Plans and manufacturer-initiated efforts develop. CIRM may deploy strategic assets within the context of these existing effort to catalyze, accelerate or enhance organic scaling (e.g. expand the CGT Access Model to additional SCD gene therapies or products for other indications) In consultations with the AAWG, dedicate CIRM resources to partnerships with CA-DHCS, NIH, FDA etc. to support the scaling of programs that have been demonstrated to meaningful impact access and affordability. 	
VIII. What are additional opportunities access and affordability?	 The California Cancer Care Equity Act (CCCEA) became law in 2022. 15 The law broadens equitable access to clinical trials for Medi-Cal patients with "complex cancer diagnosis." Medi-Cal has recently retained a contractor to support the implementation of the Act. In consultation with AAWG members, engage in the implementation of this act. Specifically, determine if Alpha Clinic assets can accelerate access to oncology trials involving CGT treatments. For example, can Alpha Clinic initiatives to streamline coverage analysis support CCCEA implementation and accelerated patient enrollment in oncology trials. 	Continuation of efforts to engage Medi-Cal Leverage Alpha Clinic efforts in alignment with payer needs

 $^{^{15} \, \}underline{\text{https://legiscan.com/CA/text/SB987/id/2609485\#:}} \sim \underline{\text{text=This\%20bill\%20would\%2C\%20for\%20covered,Oncology\%20Research\%20Program\%20(NCORP)\%2C} = \underline{\text{NCORP}} + \underline{\text{NCORP}$